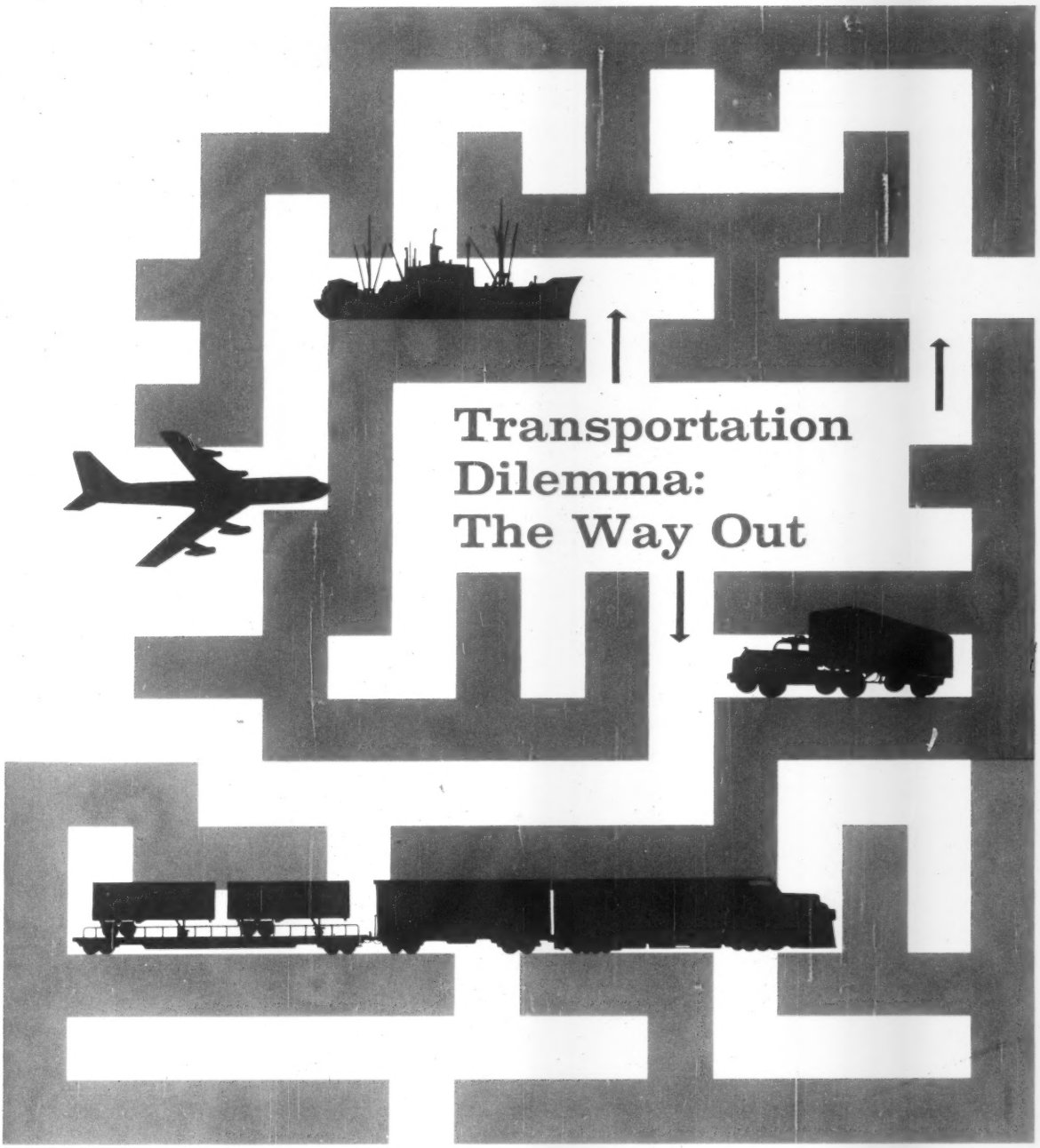
June 1960 75¢

DUN'S REVIEW
AND MODERN INDUSTRY

- Myth of the Communist Superman
- Teamwork: Key to Cost Reduction
- An Inside Look at Antitrust



Transportation Dilemma: The Way Out

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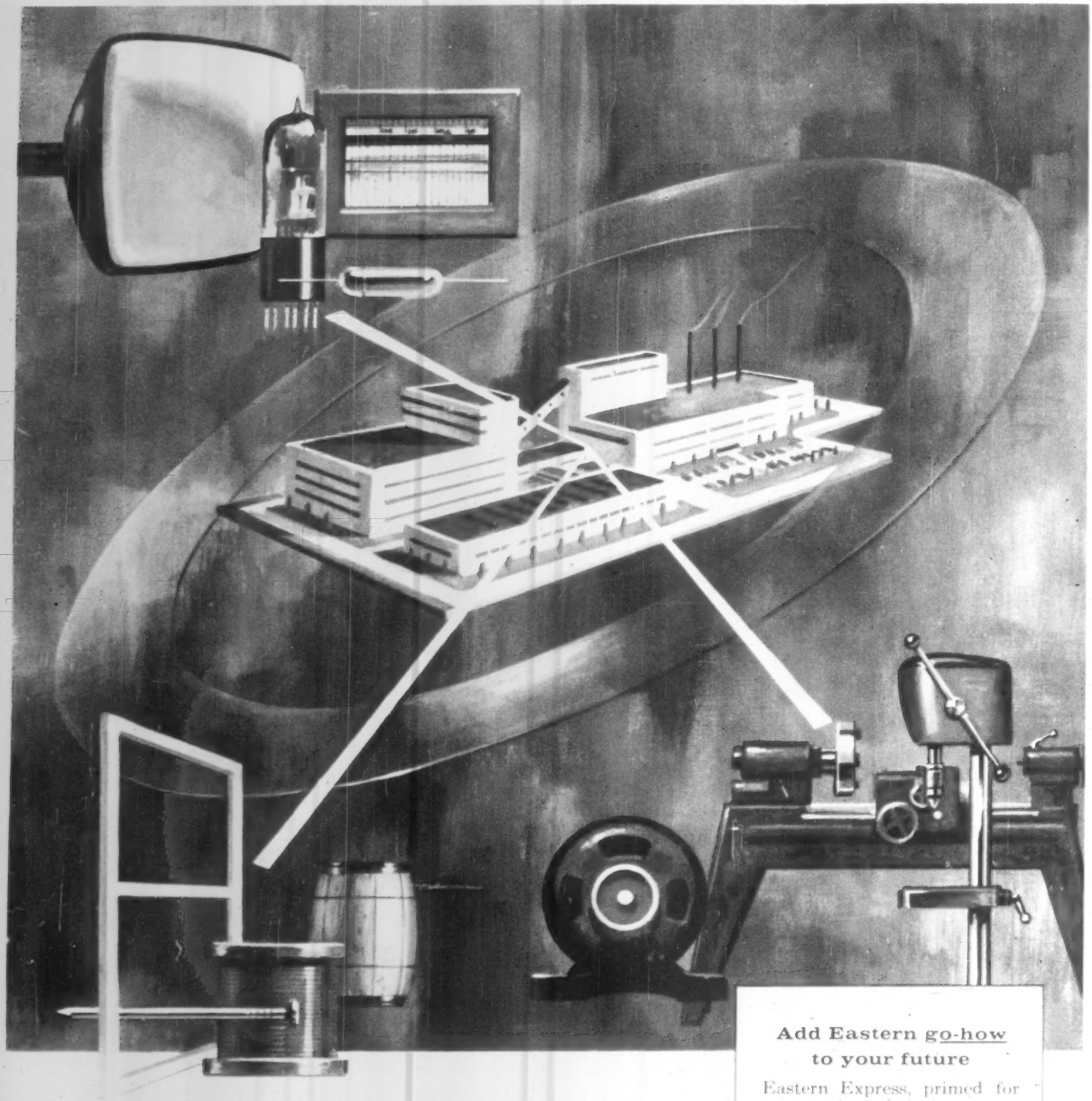

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1960
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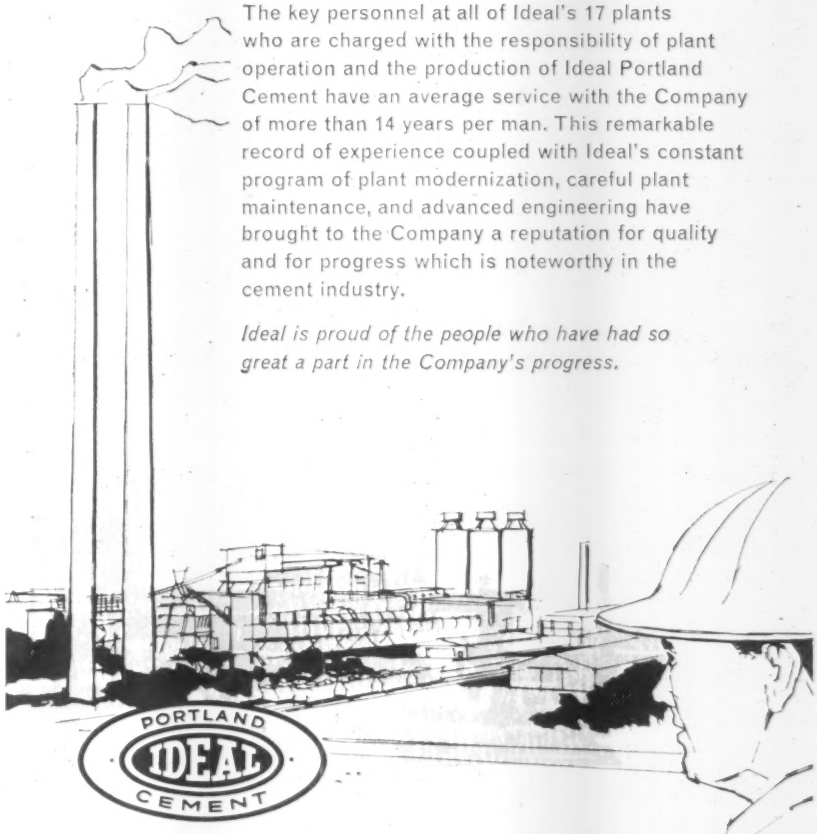

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The Trend of BUSINESS

Production: *Slow increase through the summer*

Sales: *Autos going at a faster clip than anticipated*

Profits: *Second quarter will not match first*

Failures: *Fourth straight month of rising tolls* (p. 14)

NO spectacular gains are in prospect, but business activity during the rest of 1960 is almost sure to rally from the slight setback in the early months, and to move on to new high ground before the year is out.

Consumers will still be coming to the rescue, as they did in April and May, but the economy will also be strengthened by steady gains in business outlays for new plant and equipment, as well as a moderate pick-up in over-all construction activity. This will offset the effects of the slackening rate of increase in inventory accumulation.

Industrial production will edge up gradually all summer, matching its January peak some time in the fall.

Now that the Federal Reserve Board's seasonally adjusted index of industrial production has steadied, it will begin to drift higher, touching last January's record 168 (1947-49 = 100) during the fall months.

The movement of the index will pretty much depend on output of steel, autos, and appliances. Steel production will likely hover around the current level (close to 70 per cent of rated capacity) until late summer, when substantial gains in new orders are likely, especially from the auto, appliance, and construction industries. But steel users will continue to keep their stocks at low levels until they are sure their sales will stay high. And some may even wait until sales head upward. Many steel industry officials, however, predict that later gains will be strong enough to boost 1960 output to a new record.

Before they consider any price increase, steel producers will wait to see how much new orders pick up in late summer and early fall. They will also be influenced by the level of steel imports in the months ahead.

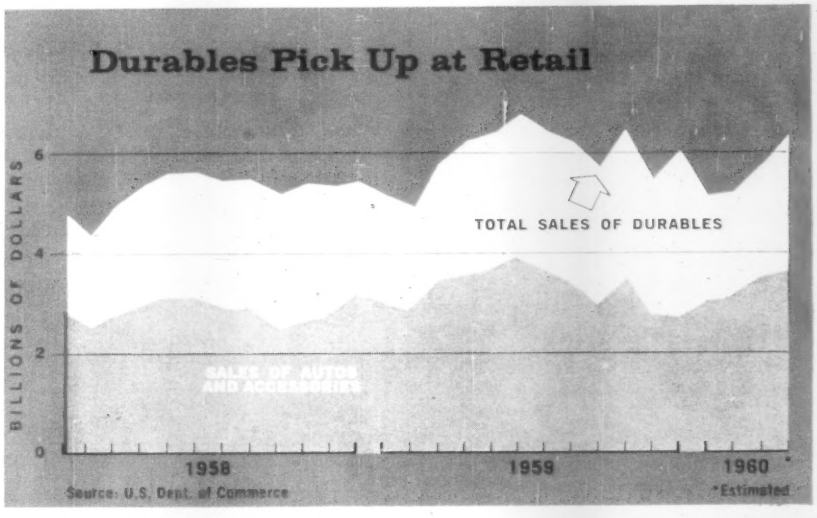
Now that May and June output schedules have been revised upward, 1960 may turn out to be the second best auto year in history.

Although auto output in the second quarter will be below that of the first three months, there were impressive gains in sales this spring, and the decline in production was less than had been forecast. An earlier-than-usual model changeover period, which seems likely, would cut output noticeably in the third quarter. But if sales remain at relatively high levels, auto production in the last three months of 1960 may well bounce back close to that of the first quarter.

Compact models will probably continue to grow more popular in the months ahead, and they will account for a larger share of production in the second quarter than in the first. Of the estimated 6.5 million domestic cars that will be sold this year, 1.7 million, or a little over 25 per cent, will be compacts. Foreign makes, however, will still continue to score sales gains.

Any increase in the production of consumer goods will probably wait until fall, but output of machinery and paperboard should start to rise soon.

Consumer interest in appliances has finally picked up—a bit behind schedule—and sales will remain satisfactory in the months ahead. But manufacturers may hesitate to revise their output schedules upward until later in the year, possibly in early fall. Factories, warehouses, and stores have a lot more appliances on hand right now than they like to see, and increased production will come only after the present stocks have been



APPRECIABLE GAINS *this Spring in sales of autos and auto parts and accessories helped boost over-all volume in durable goods at retail.*

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Cooling system combines instantaneous cooling plus storage. Complies with all sanitary codes.

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worked off. There may even be further price reductions in some major appliance lines.

We should see moderate gains in the output of machinery and paperboard during the summer, but slight reductions in the production of petroleum and coal.

Only late in the year will business men increase inventories significantly—and give a healthy boost to industrial output.

In most lines and at all levels of business, inventories are still not unusually high in relation to sales, and business men will remain cautious about adding to their holdings. During the first quarter of 1960, many of them anticipated a boom year, and steel users rushed to build up their stocks following the strike. Now, however, business men in general have slowed their accumulation of inventories.

This slackening should also continue in the months immediately ahead, especially as far as durable household goods are concerned. Come fall, the rate of stock increase should begin to quicken slightly. But even then inventories will not increase at the pace they did during the first three months of the year.

For the producers of durable goods, who so far this year have had more sales than new orders, the gap has recently narrowed a bit. With increased selling at the retail level, manufacturers' new orders will eventually exceed sales. This should stimulate a step-up in production later in the year.

Rising production in late 1960 will not push unemployment below 5 per cent of the labor force.

Although employment will stay at monthly record or near-record levels throughout the rest of the year, the fall increase in industrial output will not be great enough to cut deeply into unemployment, which will hover around the seasonally adjusted level of 5 per cent of the labor force. The steady flow of new job seekers into the labor market will be another factor tending to prevent any marked decrease in the number of the unemployed.

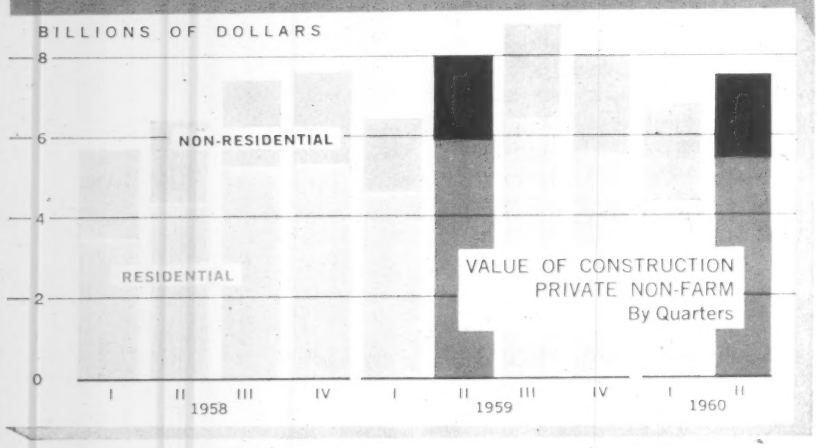
On the brighter side, high levels of employment will mean further modest gains in personal income. More noticeable increases in income levels will accompany the fall rise in industrial activity. As in the first quarter of the year, consumers will continue to save a little more than they did a year ago, at the same time spending a little more, too, since their incomes will be up.

Retail sales will hit more monthly records as the year wears on.

Once spring weather asserted itself, consumers proved their willingness to spend money. The post-Easter downturn in retail sales was not so great as in some years past. Year-to-year gains in the months ahead will narrow, however, since they will be up against strong 1959 figures.

Sales of apparel and food products will continue to show appreciable gains over a year ago. Year-to-year increases in appliances and furniture

Construction Outlays Below Year Ago



DECLINES IN RESIDENTIAL CONSTRUCTION OUTLAYS *to date have held over-all private non-farm construction below a year ago. Source: U.S. Bureau of the Census.*

Every mailing meant a mob scene!

"We have a special mailing of checks four times a year. Sales puts on a mail promotion in Spring and Fall. To get out the six mailings, we had to draft a lot of our own girls, and bring in teen-agers after school. We had six weeks of bedlam every year, and a mad scramble to get back on our regular work schedules after every mailing.

"Then we got smart and brought in the little Pitney-Bowes folder and inserter. Now one girl handles all six mailings. Peace, it's wonderful!"

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Ask any Pitney-Bowes office for details, or send for free illustrated booklet and case histories.

FREE: *Handy desk or wall chart of postal rates, including recently increased parcel post rates.*

The 3100 Inserter is a larger, high capacity model, that will stuff up to six enclosures, at speeds as high as 6,000 per hour. It can also be attached to a Pitney-Bowes postage meter mailing machine that meter stamps and seals envelopes after stuffing.

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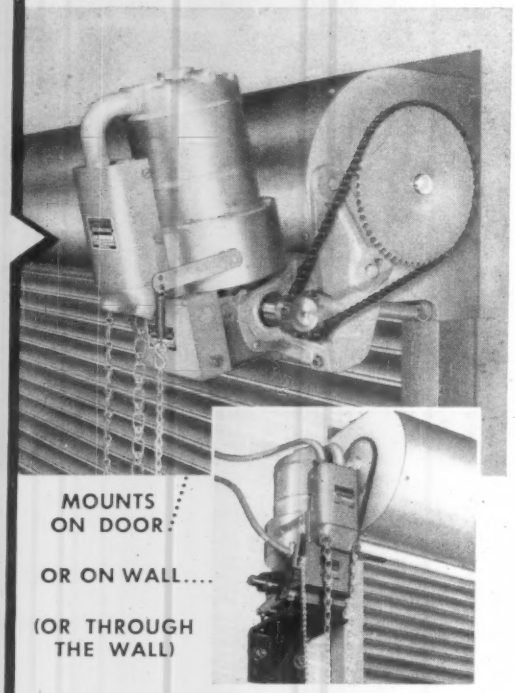

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(OR THROUGH THE WALL)

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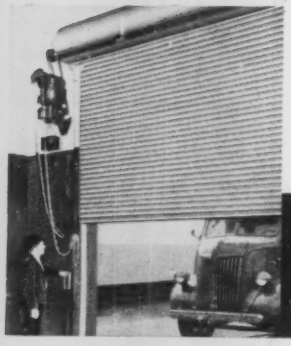


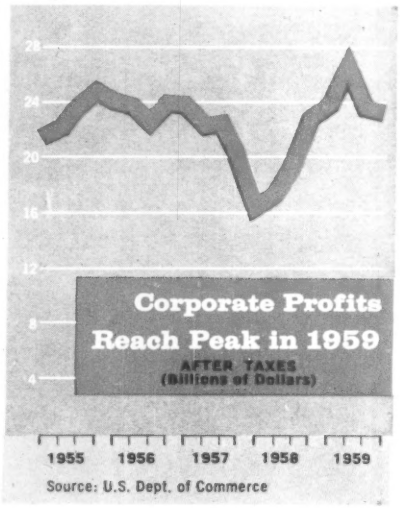
KINNEAR
ROLLING DOORS
Saving Ways in Doorways

will be more noticeable. In part this will be because these household goods did not sell as well a year ago as did apparel and food. Over-all retail trade in the last half of 1960 will show a gain of 1 to 5 per cent over the similar 1959 period—a little less than the first half increase.

Reflecting increased interest in big-ticket appliances and the relatively high sales of autos, the rate at which instalment credit expands will pick up a bit later this year.

Sustained high levels of retail sales will mean that wholesalers can expect continued year-to-year volume increases. As at retail, gains in household durables will surpass those of most other lines.

The recent trading lag in most textile markets will probably continue until fall. Customers are satisfied with inventory levels and will wait for an



AT $24.5 BILLION, *corporate profits after taxes hit a new high in 1959. Figures are seasonally adjusted annual rates.*

increase in business activity in the autumn before stepping up their orders to any sizable extent. This is especially true of heavy users of man-made fibers and industrial fabrics for upholstery.

Despite continued high sales levels, profits in the second quarter will not keep up to the level of the first three months.

Corporate profits will be down moderately in the current quarter, both from the preceding three months' levels and from the record figures of a year ago. This will reflect higher labor and other operating costs in

some key industries. But the profit picture is still comparatively rosy, and it will probably stay that way throughout 1960.

This will continue to be a healthy stimulant to business spending on new plant and equipment, and the 16 per cent gain predicted for 1960 over 1959 still seems likely. Many business men, however, were concerned because recent increases in new orders for machine tools were smaller than they had hoped. Domestic orders for the first quarter were down moderately from the similar period last year, despite the record forecasts of investment in new plants. Within the machine tool industry itself, marked increases in export sales have offset the sluggish domestic market.

In recent months there has been considerably more emphasis on spending to modernize existing facilities, rather than to build new plants. This may well continue until much of the existing excess capacity in many industries is reduced.

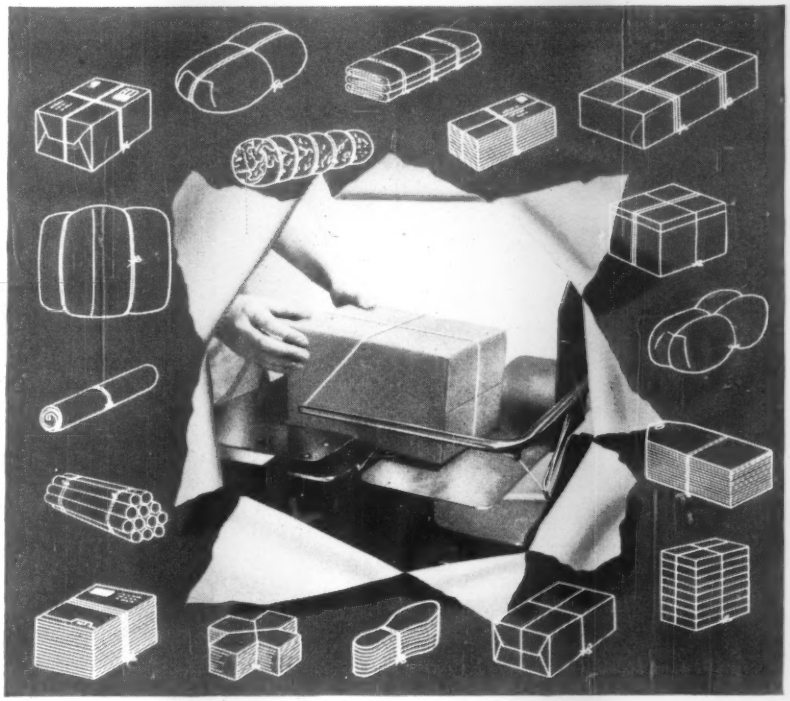
Outlays for industrial building will be well up for the year as a whole.

Despite the trend toward renovation, continued high outlays for both industrial and commercial construction—along with a possible reversal in residential building later this year—will boost over-all construction expenditures slightly over the level of a year ago although this has not yet occurred. These gains will offset declines in public outlays for highways.

The number of new privately financed housing starts will move up gradually through most of the rest of the year, though it still won't match last year's levels, and 1960 as a whole will show a moderate decline from the 1.34 million of 1959.

Consumer prices edged up slightly in the early months of 1960. Further modest rises are probable during the rest of the year, especially if business activity shows marked gains in the fall. The rise in the Consumer Price Index (compiled by the United States Bureau of Labor Statistics) that has occurred so far this year has been due more to higher charges for consumer services than to rising commodity prices.

This report was prepared in the Business Economics Department, DUN & BRADSTREET, INC., by John W. Riday.



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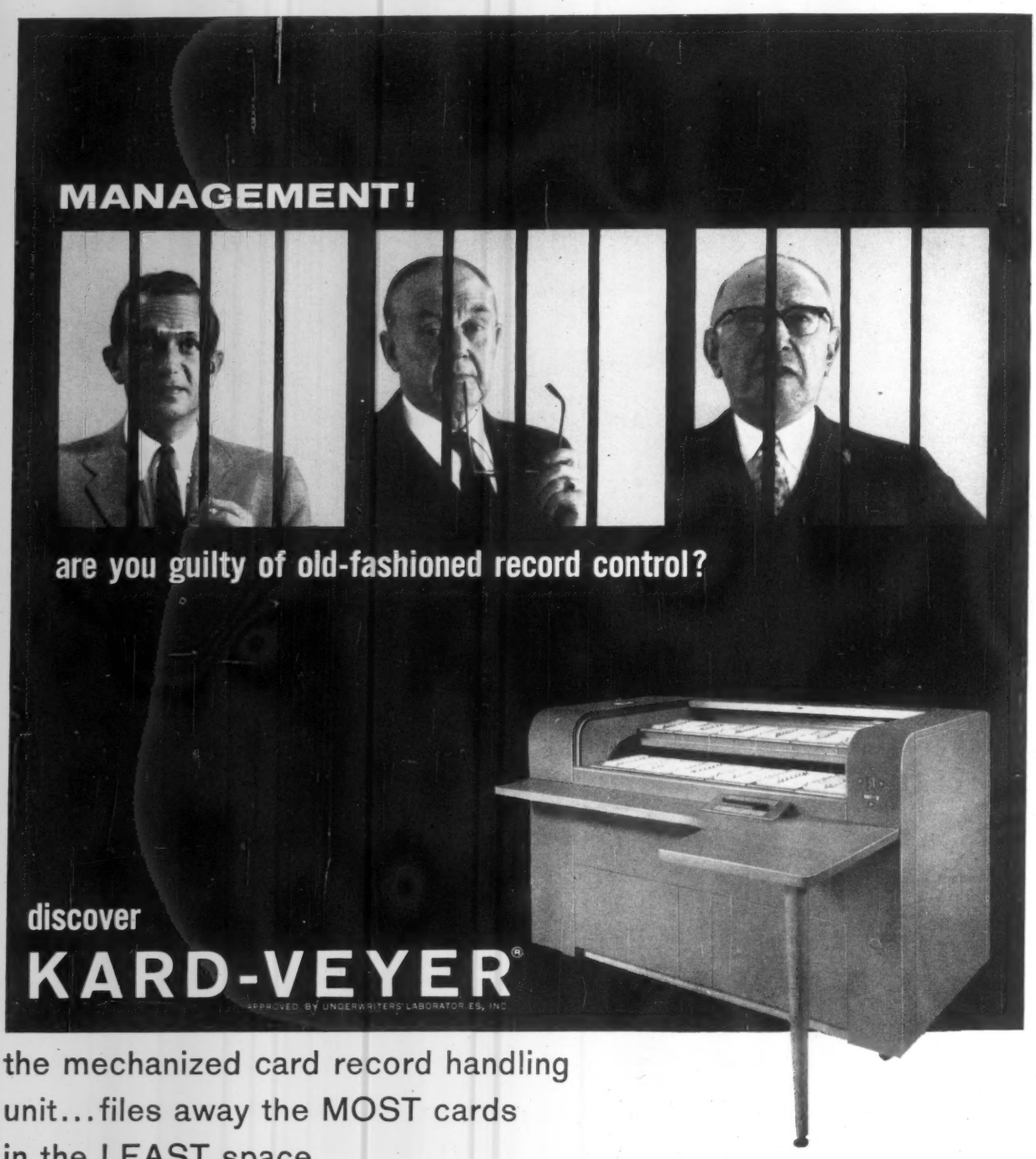

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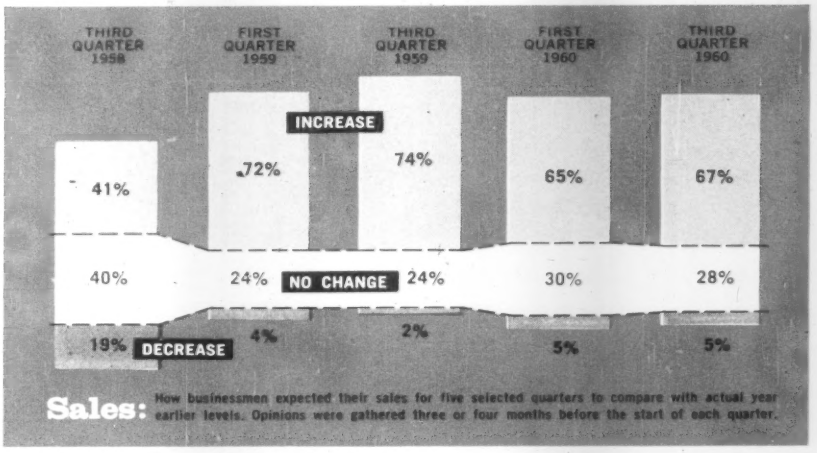
Third-Quarter Outlook

COMPARED WITH YEAR-EARLIER OPINIONS

Per cent in 1959 Up	Same	Down		Per cent in 1960 Up	Same	Down
ALL CONCERNS						
74	24	2	Sales	67	28	5
59	37	4	Profits	53	42	5
27	71	2	Prices	19	79	2
33	60	7	Inventories	27	63	10
16	81	3	Employment	15	82	3
MANUFACTURERS						
77	21	2	Sales	68	27	5
64	32	4	Profits	56	40	4
24	73	3	Prices	19	79	2
37	57	6	Inventories	28	62	10
22	76	2	Employment	18	78	4
65	33	2	New Orders	56	40	4
WHOLESALERS						
70	28	2	Sales	64	29	7
51	44	5	Profits	47	45	8
31	57	2	Prices	21	77	2
30	65	5	Inventories	25	65	10
10	89	1	Employment	8	89	3
RETAILERS						
72	24	4	Sales	67	28	5
59	38	3	Profits	52	43	5
27	70	3	Prices	12	87	1
29	58	13	Inventories	25	68	7
15	81	4	Employment	13	84	3

Business Men's Expectations

Sales Should Top the Third Quarter of 1959



YEAR-TO-YEAR sales gains were foreseen for the third quarter of this year by a good majority of the 1,555 executives questioned in the latest DUN & BRADSTREET poll of business men—but they were less optimistic than they had been a year ago.

Of all those interviewed for the current report on business men's expectations, 67 per cent expected higher sales than last year, 28 per cent foresaw no change, and 5 per cent anticipated declines. A year earlier, 74 per cent had expected sales increases, 24 per cent no change, and 2 per cent foresaw a decline.

As in the comparable poll a year ago, manufacturers of durable goods were most optimistic about their sales prospects, while wholesalers were the least enthusiastic.

Most of the respondents thought their sales gains would result from increased physical volume, since 79 per cent foresaw no change in their selling prices. A year earlier, 71 per cent had anticipated steady prices. In the current survey, retailers were most hopeful that they would be able to hold the price line. The largest percentage expecting to increase prices was found among the wholesalers.

The executives were a little less confident about their profit prospects for the third quarter of this year than they had been for the comparable period of 1959. When they were questioned a year ago, the outcome of labor negotiations in the steel industry was still unknown and it looked as though a strike could be avoided. Last year, too, gains over recession-tainted 1958 were being taken for granted.

Only 53 per cent of all respondents in the current questioning expected year-to-year gains in profits. Makers of durables were the most hopeful about profits, just as they were about sales prospects.

When asked to project new orders, manufacturers were not nearly so sanguine as they had been at this time a year ago. Gains over the third quarter of last year were foreseen by 56 per cent of all the manufacturers in the latest poll, while last year at this season, 65 per cent had expected orders to be on the upside.

No change from a year ago in inventory levels was expected by 63 per cent of those interviewed. The greatest proportion who expected to increase their stocks was found among manufacturers of non-durable goods —29 per cent. The largest percentage expecting their stocks to fall below year-earlier levels was among makers of durables—13 per cent.

Although the "ups" outnumbered the "downs" three to one, a large majority of the business men expected no change in the number of their employees during the third quarter. This was especially true of the wholesalers: 89 per cent anticipated no change, 8 per cent expected increases and 3 per cent declines. In contrast, 75 per cent of the durable manufacturers expected the same employment levels, 20 per cent expected to add to their payrolls, and 5 per cent anticipated declines.

—JOHN W. RIDAY
Business Economics Department

It should be remembered that this survey is not a forecast, but an indication of the views held by a representative group of business men when surveyed late in April.

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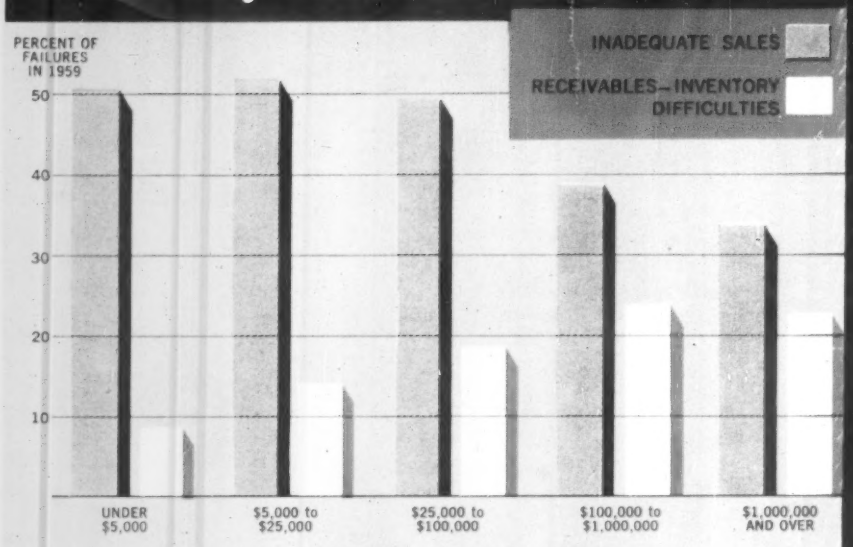
Business Failures

Casualties continue to climb
Construction tolls up from April 1959

Causes Vary with Failure Size



BUSINESS failures went up to 1,370 in April, the fourth straight month of increase. Although the rise slackened considerably from the 10 per cent pace of March, the toll ran 6 per cent above a year ago and was the heaviest for any month since April, 1958, when 1,458 casualties occurred.

Concerns were failing at an annual rate of 55 for every 10,000 listed in the DUN & BRADSTREET *Reference Book*. Up moderately from 51 in March of this year, and 52 in April of last year, the rate still remained below the recession level of 60 in 1958.

In contrast to the continued climb in the number of failing businesses, their liabilities dipped to $69.2 million from the eleven-month high of $70.2 million in March. This downturn reflected the lower number of exceptionally large casualties. Hardest hit during April was the medium-size group, with liabilities in the $25,000 to $100,000 range.

Retailing, which had held steady a month earlier, accounted for nearly all of the rise in mortalities during April. Among automotive and building materials dealers, tolls ran the heaviest since 1958. And casualties of food stores and restaurants were the most numerous since the summer of 1959. Wholesaling and service failures held close to their March levels, while manufacturing and construction dipped slightly.

Construction casualties, however, showed a steep climb from April a year ago—they rose over a third, with the sharpest upturns from 1959 among subcontractors. Compared to

THE FAILURE RECORD

	Apr. 1960	Mar. 1960	Apr. 1959	% Chg. †
DUN'S FAILURE INDEX*				
Unadjusted	58.7	55.2	55.6	+ 6
Adjusted, seasonally	54.9	51.1	52.0	+ 6
NUMBER OF FAILURES	1370	1335	1292	+ 6
NUMBER BY SIZE OF DEBT				
Under $5,000	156	153	203	−23
$5,000—$25,000	651	617	584	+11
$25,000—$100,000	428	402	366	+17
Over $100,000	135	163	139	− 3
NUMBER BY INDUSTRY GROUPS				
Manufacturing	215	224	202	+ 6
Wholesale trade	140	143	132	+ 6
Retail trade	674	607	671	+ 1
Construction	220	241	166	+33
Commercial service	121	120	121	0
LIABILITIES (In thousands)				
CURRENT	$69192	$70193	$71907	− 4
TOTAL	70338	70393	72659	− 3

*Apparent annual failures per 10,000 enterprises listed in the DUN & BRADSTREET *Reference Book*.
†Per cent change, April 1960 from April 1959.

In this record, a "failure" occurs when a concern is involved in a court proceeding or in a voluntary action likely to end in a loss to creditors. "Current liabilities" here include obligations held by banks, officers, affiliated and supply companies, or governments; they do not include long-term publicly held obligations.

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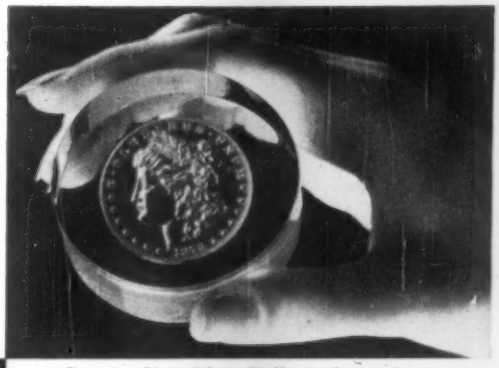

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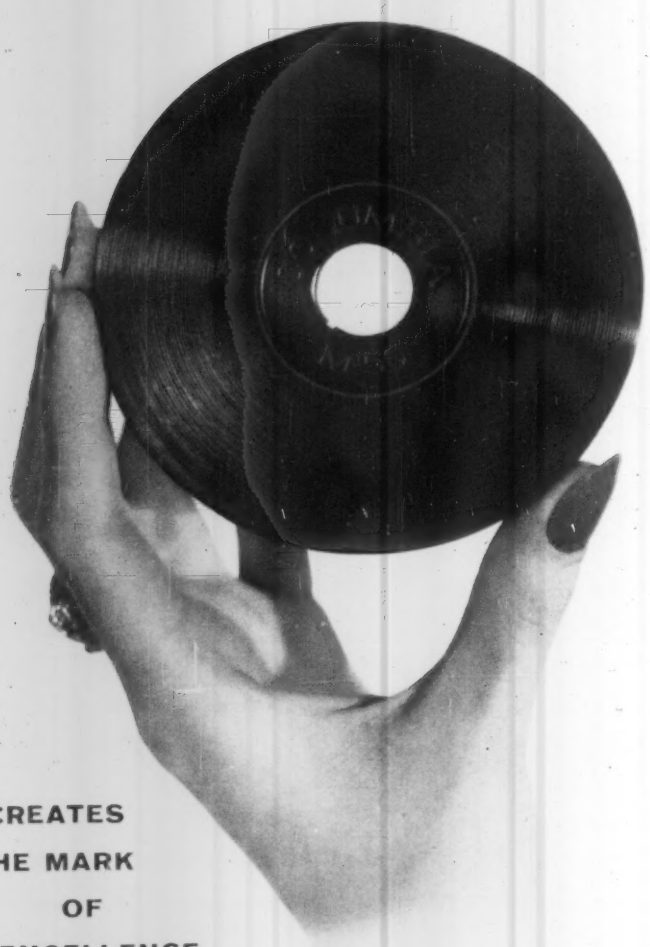

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April 1959, there was no change in tolls among service industries, but there was a rise of 6 per cent in manufacturing and wholesaling. Within retailing, general merchandise and apparel failures dropped, but there were increases of over 20 per cent among floor coverings, hardware and automotive dealers, and garages.

Only New England and the Middle and South Atlantic States reported casualty declines from March. Failures in the Middle Atlantic States fell to the lowest level in six months, but in the Mountain and Pacific States they surged to post-war highs. Tolls in non-metropolitan districts were the heaviest in two years, but large cities also suffered appreciably heavier mortalities. Failures in Illinois, Michigan, Kentucky, Tennessee, Colorado, Arizona, Washington, Oregon, and California were largely responsible for the year-to-year rise.

FAILURES BY DIVISION OF INDUSTRY

	Cumulative total (Four Months)		Liabilities in million $	
	1960	1959	1960	1959
MINING, MANUFACTURING	845	834	75.5	73.6
Mining—coal, oil, misc.	31	26	4.8	3.6
Food and kindred products	53	57	4.6	5.0
Textile products, apparel	148	149	11.0	7.1
Lumber, lumber products	166	165	10.8	8.9
Paper, printing, publishing	61	56	3.1	2.9
Chemicals, allied products	22	22	1.2	1.5
Leather, leather products	27	29	3.5	2.7
Stone, clay, glass products	16	16	1.3	2.1
Iron, steel, products	61	47	8.2	3.0
Machinery	82	90	9.7	18.5
Transportation equipment	36	30	4.8	2.7
Miscellaneous	142	147	12.4	15.6
WHOLESALE TRADE	492	494	36.8	35.0
Food and farm products	126	115	12.5	12.9
Apparel	12	17	.5	.8
Drygoods	14	15	.6	.4
Lumber, bldg. mats, hdwre.	68	49	4.1	4.1
Chemicals and drugs	14	17	.3	.4
Motor vehicles, equipment	33	31	2.1	2.3
Miscellaneous	225	250	16.6	14.2
RETAIL TRADE	2477	2520	65.3	98.7
Food and liquor	330	403	8.5	12.1
General merchandise	87	124	4.1	10.5
Apparel and accessories	353	437	8.0	22.4
Furniture, furnishings	354	304	11.7	12.2
Lumber, bldg. mats., hdwre.	160	158	4.8	5.4
Automotive group	398	331	9.0	8.8
Eating, drinking places	461	463	12.0	13.8
Drug stores	55	37	1.1	.9
Miscellaneous	279	263	6.2	12.6
CONSTRUCTION	849	703	55.9	35.4
General bldg. contractors	317	239	28.1	17.8
Building subcontractors	476	402	23.5	14.1
Other contractors	56	62	4.3	3.5
COMMERCIAL SERVICE	437	438	20.5	26.4
TOTAL UNITED STATES	5100	4989	254.0	269.1

Liabilities are rounded to the nearest million; they do not necessarily add up to totals.

This report was prepared in the Business Economics Department by Rowena Wyant.

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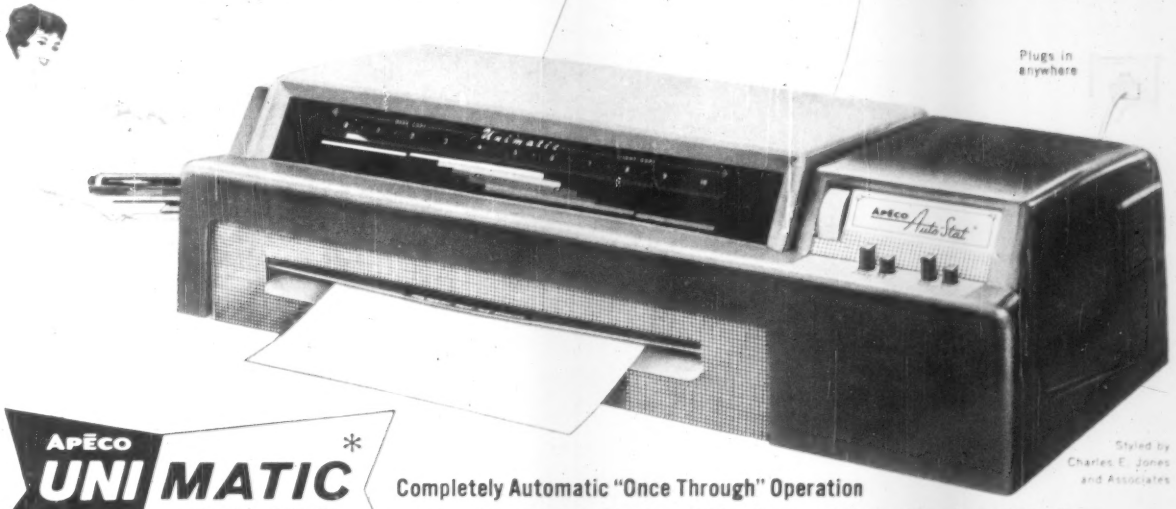

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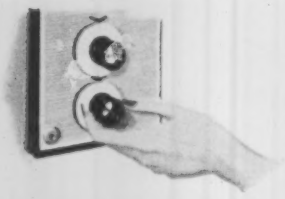

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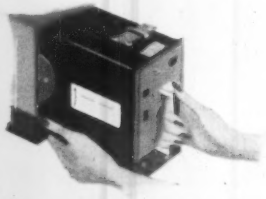

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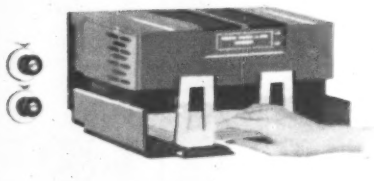

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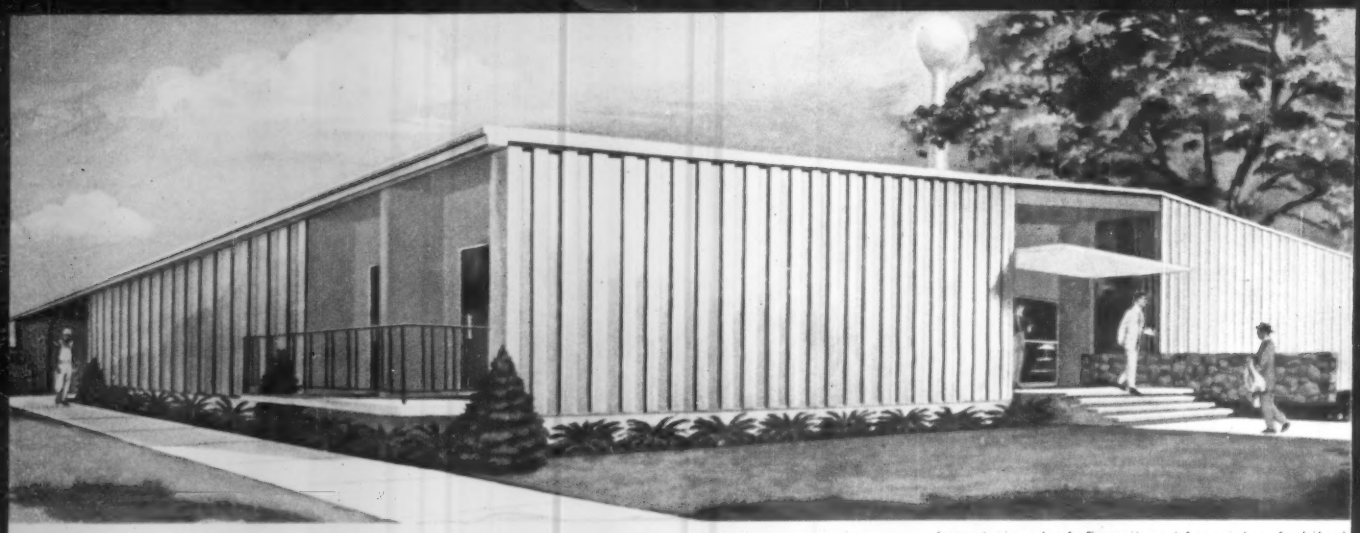

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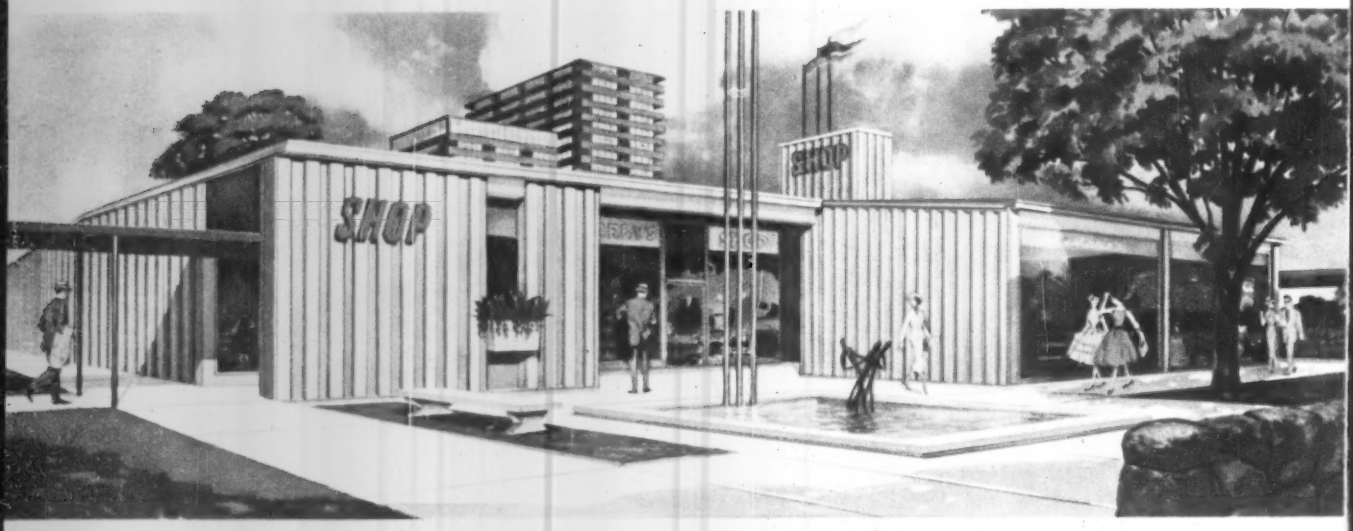

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WASHINGTON Business Front

JOSEPH R. SLEVIN

- ☆ *Tight money and economic growth—two key issues make basic timber for 1960 platform carpenters.*
- ☆ *"Unfair!" cries the Federal Reserve at charges that rising interest rates contribute to inflation.*
- ☆ *The Administration may have more trouble than it thought in gaining a budgetary surplus for fiscal 1961.*

WASHINGTON, D.C.—The political platform season is upon us. The Democrats and the Republicans will soon be giving the voters their versions of what they have achieved in the past and hope to accomplish in the future.

Platforms are campaign documents that contain campaign promises, and most voters don't think they are meant to be believed. But the platforms deserve better than the cynical abuse that normally is their lot, for they are the end product of long debates and bitter wrangles within the drafting committees. When the Democrats endorsed a civil rights plank that the Southerners would not accept in 1948, Alabama and Mississippi walked out of the convention. And when the Democrats bowed to textile industry demands and proclaimed in 1956 that imports are causing "serious economic injury to hundreds of thousands" of American workers, they took a dramatic step away from the traditional free trade position of their party.

The 1960 Resolutions Committees won't officially begin work until July. But special Democratic platform groups have been holding public hearings in key cities for the past month. Their declared objective is to gather information on major issues for the platform. Actually the hearings seem to be a shrewd maneuver to publicize Democratic criticisms of Eisenhower Administration policies.

"Sneak" previews

The voters already have had generous previews of the platforms that will be drafted in July. The Democrats supplied theirs in a series of special reports published by the liberal Democratic Advisory Council that covers everything from foreign policy to domestic economics and should provide a good share of the essential timber for the hammers and saws of platform committee members in July.

The Republican preview came in a group of four reports published last October by a special 40-man Committee on Program and Progress, headed by Charles H. Percy, president of Bell & Howell Company. Described as a statement of goals designed to meet the problems of 1976, it covers science and technology, national security and peace, human rights and needs, and economic opportunity and progress.

Both parties' 1960 platforms will be measurably more liberal than the 1956 statements, just as those, in turn, were more liberal than the 1952 platform. American political attitudes aren't changing rapidly—but they *are* shifting, and the shift is from right to left.

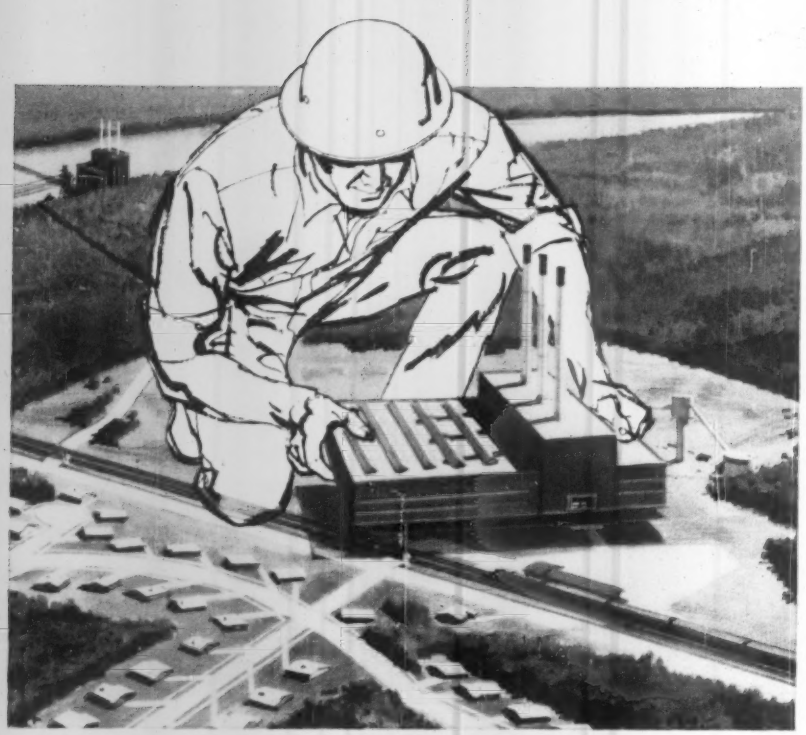
It seems reasonably certain at the moment that both platforms will be more liberal than the parties which supposedly stand on them. This will be true of the Democratic statement because the basic spadework will be done primarily by party intellectuals, who are well to the left of the rank-and-file Democrat. And it will be true of the Republican program because that will be drafted under the orders of a presidential candidate who is determined to go before the voters with a broadly based statement of political principles. Those principles, however, have little appeal to the party wheelhorses who will control the major state delegations at Chicago.

Vice-President Nixon believes in emphasizing the positive features of a program and soft-pedaling its negative aspects. Where the GOP instinctively would be inclined to stress holding the line against price increases, Nixon would rather say that the nation can achieve steady economic growth by following anti-inflationary programs. Where old-line party members would be disposed to talk about balancing the budget as a good in itself, Nixon would rather emphasize the importance of a powerful military establishment—referring to a balanced budget as one means we can use to keep the economy strong.

The issues: credit and growth

The economic sections of the Democratic and Republican platforms will clash at one point after another, but the two most important disputes will be over tight money and economic growth.

The Democrats are now firmly committed to the position that the Eisenhower Administration has made money excessively tight, that loans are too difficult to obtain, and that interest rates are too high. The Dem-



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ocratic Advisory Council declared in December that the Administration's "high interest policy" has contributed to inflation, instead of holding prices in check as the Republicans claim. It also charged that high interest rates have added to the cost of managing the Federal debt, as well as to local government borrowing costs, have made it more expensive to obtain mortgage loans, installment credit, life insurance loans, and small business and farm loans.

For its part, the Republican report entered a vigorous defense of the monetary and fiscal policies that the independent Federal Reserve System and the Administration have been following. The Republican platform will do as much, or more. The Percy committee report, prepared by a subcommittee under Gabriel Hauge, former economic assistant to the President, countered Democratic complaints of tight money with a favorite Hauge charge: the Democrats want "loose money."

And after the election?

It's quite certain that the Republicans will continue to follow their present monetary and fiscal policies if their nominee wins in November. It's far from sure, however, that if they are victorious the Democrats will swing over to the easy money approach their most vocal spokesmen advocate. They began their attack on what they then called "hard money" before the 1956 convention and have been sniping away ever since. But Congressional proponents of easy money have been unable to carry a majority of their colleagues with them, and from the White House a Democrat would look at monetary problems from an angle sharply different from the one favored by most of the party's Advisory Council.

Economic growth promises to be a central issue in the campaign. Republicans believe the prime responsibility for economic growth rests on the initiative of individual business men; Democrats say the Federal Government should accept far more responsibility for allocating national resources than it has thus far.

The dispute can be oversimplified, for the Federal Government now influences economic growth directly and indirectly through a broad array of programs—tax incentives, subsidies, mortgage insurance, farm price supports, public construction, slum clear-

ance, small business loans, defense contracts.

The argument is not between those who would have the Federal Government do nothing and those who want it to do everything, although it is often, and misleadingly, made to sound like that. In reality, it is a debate over the central question of whether the Federal Government should actively guide a larger share of resources away from consumer goods and into weapons, foreign aid, schools, hospitals, housing, roads, dams and other public projects. The Democrats would have the Federal Government do more and the Republicans would have it do less—or, at the limit, very little more.

The FRB Hits Back

The Federal Reserve Board has pulled together some figures to counter arguments that rising interest rates are inflationary and add to costs. It figures that interest payments are only 1.4 per cent of total state government disbursements, 3.3 per cent of municipal expenditures. The central bank is sensitive to the charge that it deliberately tries to boost interest rates to curb borrowing in prosperous times.

What the Federal Reserve does try to do is limit the supply of money and credit to an amount that consumers and business men can use without generating inflationary buying pressures. Interest costs are the price of money. They go up in good times because the demand for money rises faster than the supply.

Uncertain Surplus

The Administration still hopes the Federal Government will have a budget surplus in fiscal 1961, the year that begins July 1, but the black-ink entry is not yet in the bag. As of this writing, Congress is refusing to grant some of the revenue increases Mr. Eisenhower asked—and the rejections may chop as much as $1 billion from the projected $2.4 billion surplus. The lawmakers are also giving sympathetic consideration to a number of Administration-opposed spending programs which, if enacted, could add substantial sums to the spending total the President forecast in his January budget message. What is more, if business activity falls short of expectations, Government tax receipts will fall short, too. END

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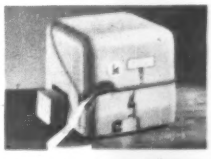
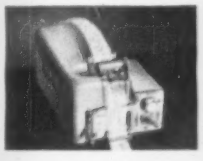


Typing Reperforator perforates, transmits and receives in tape form.

Tele-Transmitter transmits from information stored on punched tape.



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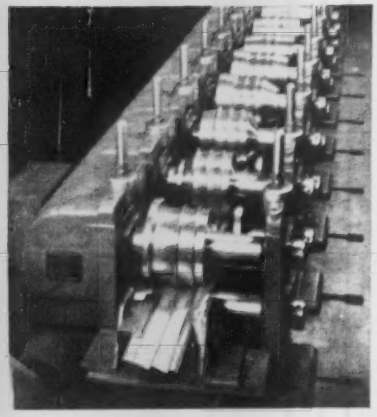

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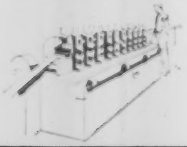

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Gaging a company's vitality

The public's trust in management

A healthy concept of profit

R&D: "The industry of discovery"

FREDERICK B. KAPPEL, *president, American Telephone and Telegraph Company.*

Secrets of Business Vitality

A company may be in the full bloom of current prosperity—but dying on the vine so far as its power to build the future is concerned. What are the signs that its vitality is waning? If its people cling to old ways in the face of new situations; if they have nothing to strive for, to become; if there is a decline in "reflective" thinking about the adequacy of current methods, as distinguished from "action" thinking; if older managers insist that new men adhere rigidly to methods that were successful in the past; if there is a low tolerance for constructive criticism.

What makes a vital business? Vital people make it—not machines or dollars or material resources of any kind. There is some potential of vitality in nearly all people, and a business can bring this out by offering the opportunity and incentive for work that is meaningful to the man who does it, by setting exciting goals, by encouraging constructive and stimulating relationships, by supporting attitudes of independence and self-reliance, by upholding the kind of business character and ethics that allow employees to maintain their standing as respected members of the community, by demanding their best at all times.

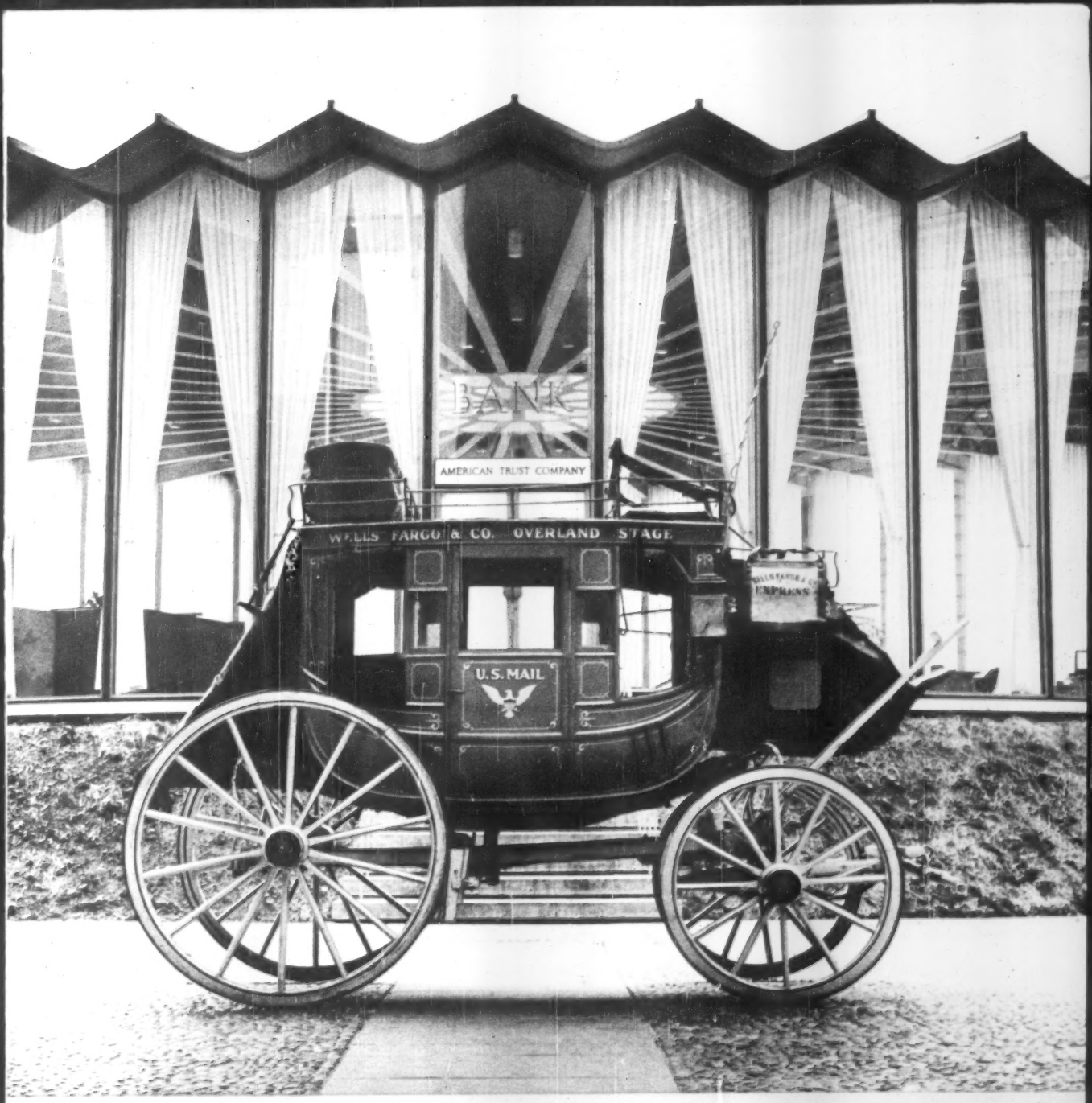
From a McKinsey Foundation Lecture delivered before the Columbia University Graduate School of Business.

RUDOLPH F. BANNOW, *president, National Association of Manufacturers.*

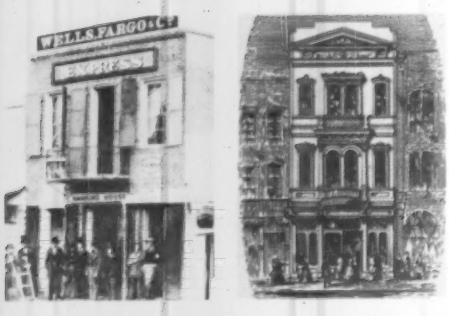
A Job for Management

People have an abiding trust in management's ability to keep increasing jobs, wages, fringe benefits, the standard of living, and prosperity in general. People have this trust—but often without any real understanding of the management function or the conditions management needs to do its job well. For instance, finance, research, manufacturing processes, sales, and distribution may be organized perfectly—but if manpower is not organized and utilized effectively, the enterprise can come apart at the seams.

Management has a responsibility to look out for its people—all of them—right down to the night watchman, and to manage well enough so that all

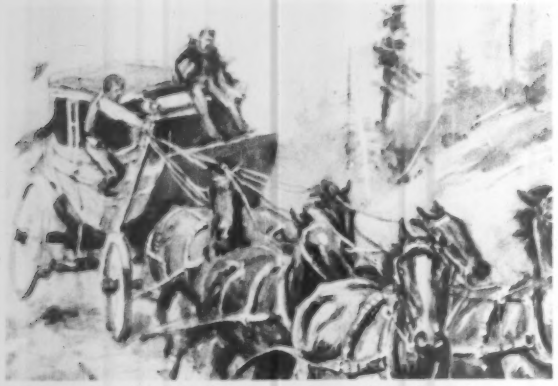


the challenge of change...



Wells Fargo Bank started in 1852; American Trust, two years later

The Gold Rush of 1849 marked the beginning of banking in California (Z. Mackay Coll.)



1858—The Overland Stage raced cross-country in 25 days

1906—The earthquake lasted 48 seconds, cost $500,000,000!

The Lure of California

The reason for Westering has changed through the years, but whether gold, silver, sunshine or science, the strong pull has never diminished. And as each great wave of Argonauts has come, new needs have challenged the business community. Two banks have always stepped out to meet this change. They have shared a daring and a flair for service that have made them one in spirit since the early 1850's.

Wells Fargo opened a banking and express office in San Francisco in 1852 to end the miner's nightmare of losing his gold. Two years later, in 1854, the first of the family of banks that became American Trust Company was established as the San Francisco Accumulating Fund Association. It offered the West's first systematic savings plan. In 1857, this became the Savings & Loan Society.

The First Branch Banking

Wherever there was a need, Wells Fargo soon opened an office, and its network in the Mother Lode was the first branch bank system in the West. Through these banking and express offices, Wells Fargo weighed, stored and shipped countless millions in gold dust and bullion. Much of this was carried by its famous stages.

Urban Banking Expands

Meanwhile, the American Trust forerunner was pioneering in urban banking. In 1858, it introduced the first installment loans on real estate. In 1862, its members formulated and supported the first California banking law, then opened the first bank under this act — the San Francisco Savings Union.

The Family Trees

As the Comstock Lode brought fabulous new riches to California in the Silver Seventies, the family trees of both Wells Fargo and American Trust were growing. Four of the Silver Kings — Flood, Fair, Mackay and O'Brien — established the Nevada Bank in 1876 with the largest capital in the country. The first trust company west of the Rockies, the Union Trust Company, was formed in 1893. Both were major forces in the expanding Wells Fargo Bank. Two of the biggest American Trust banks opened their doors, too. In 1875, the First National Gold Bank in Oakland, and in 1899, the Mercantile Trust Company in San Francisco.

The Earth Trembled

On April 18, 1906, the great tremor lasted just 48 seconds, but it meant holocaust in San Francisco. But even earthquake and fire didn't disturb bank business for long. With customary pride in "business as usual," Wells Fargo wired its correspondents that

funds would be available "as soon as the vaults have cooled enough to open." In only a matter of days Wells Fargo and the American Trust predecessor were back in full operation.

The Changing Land

In the early Twentieth Century, the lavish land began to realize its vast potential and agriculture became a science. In the cities fanning out around the Bay, the need for capital, the need for more services, brought branch banking as we know it today. Many banks joined the American Trust family to put the full scope of metropolitan banking to work for their customers. By 1927, when the American Bank and Mercantile Trust became American Trust Company, the family included branches in every major community in the Bay Area.

Industry Grows

Steel, minerals, salt, gas, oil, timber, food processing were the foundation that made San Francisco the great business center of the West. Wells Fargo, serving these many industries with skill and knowledge, emerged as a major commercial bank with correspondents around the world. Its foreign service, which had originated in the shipment of treasure, was expanded to serve the vast Pacific basin.

It was the versatility of the land arcing the Bay, coupled with the sound financial and business principles of a people wise in its riches, that checked the blow of the Depression.

Battleship Gray—the War Years

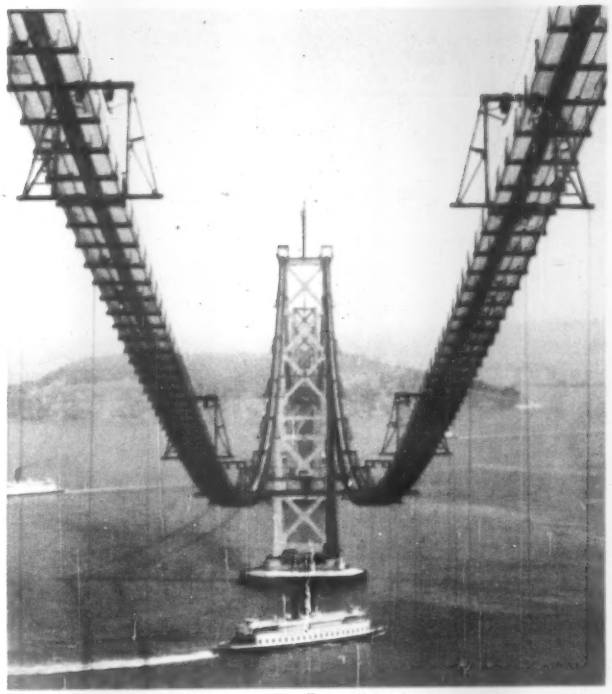
World War II began and people came to Northern California by the hundreds of thousands. They poured across the great Bay bridges to work in shipyards, supply depots, refineries, tank factories. Here servicemen and their families said good-bye and hello—and for many this was the remembered time that brought them back to stay. Today, we are still in the midst of this great wave of migration.

The New World of Money

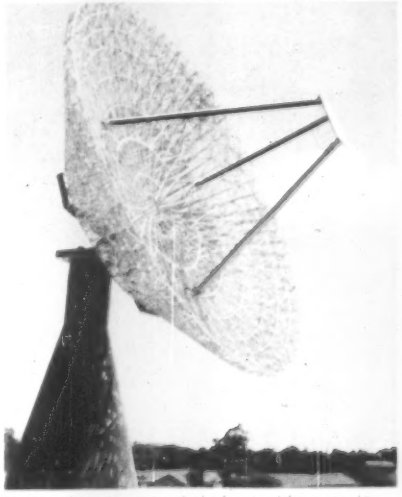
Wars and Westering have brought new financial needs, too. The economic profile of the population has changed. More people have more income and they are learning new ways to use and conserve it. To meet these needs, Wells Fargo and American Trust have expanded their services into a new pattern for a new time.

Together

Thus, for more than a century, both banks have met every sweeping change with courage and imagination. The years ahead hold challenges as great as those of yesterday and today. We are proud of the part we have played as two banks. Now, as one bank, we welcome an even more demanding tomorrow.



1930's—Two great bridges drew the Bay cities closer



Radio telescope—symbol of scientific complex

New Headquarters under construction

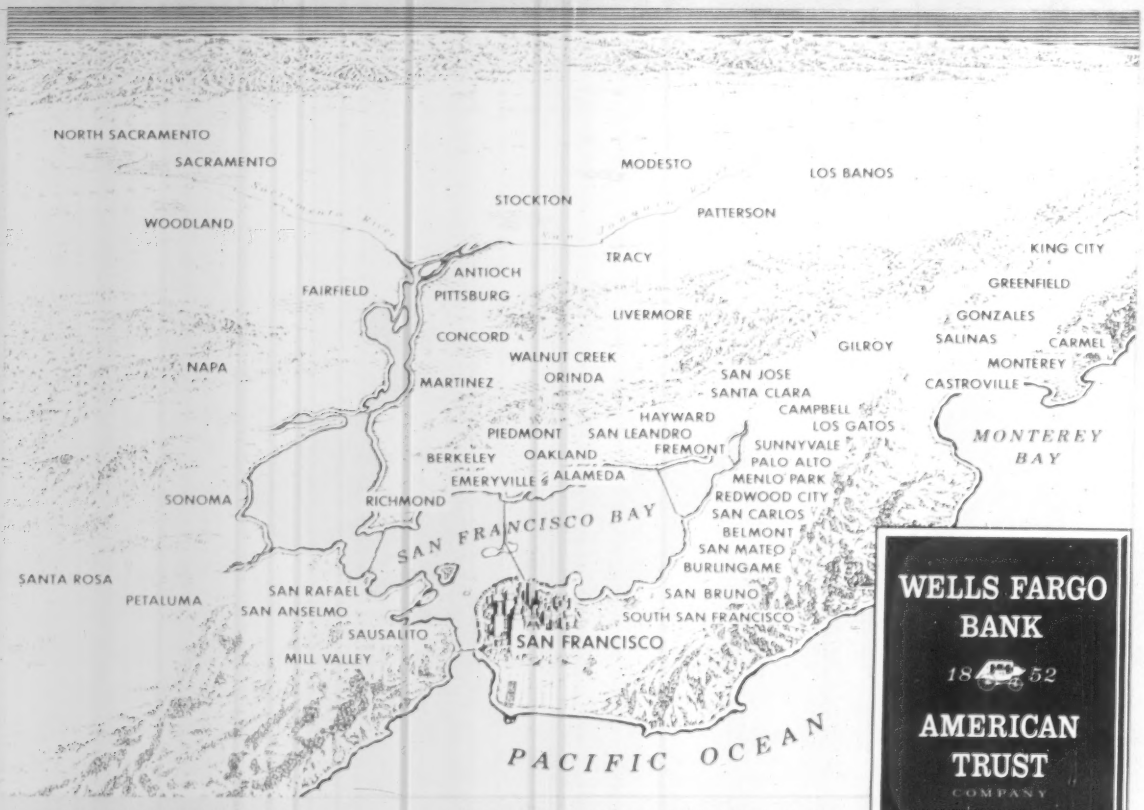
WELLS FARGO BANK

1852

AMERICAN TRUST COMPANY

HEAD OFFICE: SAN FRANCISCO

now one bank



WELLS FARGO BANK

1852

AMERICAN TRUST COMPANY

MEMBER FEDERAL RESERVE SYSTEM

MEMBER FEDERAL DEPOSIT INSURANCE CORPORATION

Statement of Condition, March 31, 1960

RESOURCES		LIABILITIES		
Cash on Hand and in Banks	$ 413,089,300.30	Deposits		$2,230,523,079.66
U.S. Government Obligations	516,803,935.92	Acceptances Outstanding		4,650,780.55
State, County, and Municipal Bonds	140,397,042.17	Reserve for Unearned Discount		15,998,747.83
Other Bonds and Securities	11,011,647.26	Reserve for Interest, Taxes, Etc.		28,573,358.72
Stock in Federal Reserve Bank	4,050,000.00	Federal Funds Purchased		8,400,000.00
Federal Funds Sold	11,500,000.00	Other Liabilities		9,765,318.40
Loans and Discounts	1,325,431,514.69	Capital Funds:		
Bank Premises and Equipment	21,357,849.57	Capital Stock ($10.00 par value)	$43,298,750.00	
Other Real Estate	1.00	Surplus	91,701,250.00	
Customers' Liability under Acceptances	4,517,328.40	Undivided Profits	33,480,024.63	168,480,024.63
Accrued Interest Receivable and Other Assets	18,232,690.48			
Total Resources	$2,466,391,309.79	Total Liabilities		$2,466,391,309.79

United States Government and other securities carried at $298,248,207.73 are pledged to secure U.S. Government Deposits, other public funds, trust deposits, and for other purposes as required or permitted by law.

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*ADVISORY DIRECTORS

its employees can earn a good living.

But, in turn, its employees need to understand that management must be allowed to manage. It is not doing its job if it abdicates its decision-making responsibility to committees or higher authorities—or to union stewards and Government bodies. To meet its responsibilities, management must have the authority to improve efficiency in every possible way, to compete in every possible way, to organize men, money and materials so as to achieve the best possible result.

From an address to the 32nd NAM Institute on Industrial Relations.

JOHN R. CONRAD, *president, S & C Electric Company.*

The Morality of Profit

Today, profit is a nasty word. Why? Because long ago the abusive dissipation of excessive earnings by the greedy inspired the moralists' and humanitarians' criticisms. Yet "profit" is no longer the tribute exacted by the keeper of a toll gate or the ransom demanded by the highwayman who commands a narrow gorge.

The world today provides many horrifying illustrations of the immorality of "no-profit." Deductible business entertainment has reached fantastic proportions, which the historian may liken to the last extravaganzas of the Roman Empire. Unreasonable speculation is another by-product of no-profit. No-profit has forced many manufacturers to cut corners—there is an awful lot of shoddy merchandise designed around a price tag.

In any economy, some impersonal mechanism must measure wants and meter capital formation and flow. Prices and profits perform these functions. If prices are not free to move with supply and demand, the *real* wants of the people cannot be measured. If profits are not free of restraint, capital cannot flow where it will do the most real good.

From an address to the 22nd Annual American Power Conference.

MARK W. CRESAP, Jr., *president, Westinghouse Electric Corp.*

Promoting Basic Research

A new industry has come on to the American scene. It is our greatest hope for accelerating our national growth and maintaining a strong position in a dangerous world. I refer to what the late Dr. Sumner Slichter named "the industry of discovery." Now we are working not only with new products, processes, and materials, but also with new principles and concepts. Yet national expenditures for basic research—involving relatively small sums of money—have not kept pace with those for applied research. And there are strong arguments against the Government's paying a still higher percentage of this bill—excessive control, to mention only one. If industry is to provide the additional support, however, it must be given incentives. Outright tax credit for research contributions and a write-off of more than 100 per cent of expenditures on research facilities are two of several proposed.

The only known element in our scientific and technological race with the Soviet Union is the fatal consequence if we come in second. Our country has tremendous resources in materials, facilities, capital, and human talent. We will never lose the struggle for research supremacy if we decide what we must do—and then do it with energy, courage and decision.

From a speech before the Economic Club of Detroit.

the Right Combination...

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Model 1056—Battery operated

PRICE

"the DRUM HANDLER"
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MORE THAN 80 BIG JOE MODELS

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Armed Forces Standardize Microfilm

Engineering Data Micro-reproduction System Covers Films, Punch Cards, Aperture Cards

The Armed Forces, operating active files containing more than 50 million drawings, have set military requirements for microfilming engineering drawings and related data.

The standards and specifications released April 15, 1960, by the Department of Defense for its Engineering Data Micro-reproduction System establish uniform methods for microfilming and standard formats for data presentation.

These uniform methods and standard formats, the Defense Department said, offer great space, time, and money savings.

New possibilities for inter-service exchange of engineering data are opened through the use of microfilmed drawings and related data, the Department of Defense announced.

What does this mean to industry?

Military agencies using the specifications of the Engineering Data Micro-reproduction System will ask contractors to submit engineering data in 35mm roll microfilm and punch cards. From the microfilm and punch cards, such military agencies make aperture cards to distribute engineering data for the procurement, maintenance, and supply of the nation's weapons systems.

In addition, other military agencies may require contractors to submit completed aperture cards. In these cases, the master microfilm and distribution copies are furnished in mounted aperture cards.

Even now, a number of prime contractors and sub-contractors are using a portion of the newly-adopted specifications and standards. For them, the new requirements will be integrated into existing programs.

Many contractors, anticipating the standards and specifications, have held microfilm programs in abeyance. Their engineering departments now have a ready-made set of instructions for upcoming programs.

The new standards and specifications are expected to have a cumulative effect. As more companies have microfilm equipment, industry will intensify its use of microfilm for distributing data. Even before specifications were announced, prime and sub-contractors were exchanging engineering data in microfilm format.

Industry helped set standards

Compatibility with industry is the keystone in the new standards and specifications of the Department of Defense. Industry originates much of the engineering data used by the DOD. Industry, in helping to set requirements, has created instructions that can be used for its own operations.

Standards cover broad areas

The standards and specifications documents already released are:

MIL-M-9868, Microfilming of Engineering Documents, 35mm Requirements for;

MIL-P-9879, Photographing of Construction/Architectural Drawings, Maps and Related Documents, 105mm, requirements for;

MIL-C-9877, Cards, Aperture;

MIL-C-9878 Cards, Tabulating and Aperture for Engineering Data Micro-reproduction System;

MIL-STD 804, Formats and Coding of Tabulating and Aperture Cards for Engineering Data Micro-reproduction System;

MS-21319, Gage, Aperture Cards No. 201-1.

Interim Federal Specifications cover silver halide, diazo-type, and heat developing microfilm.

The complete Department of Defense standards and specifications cover:

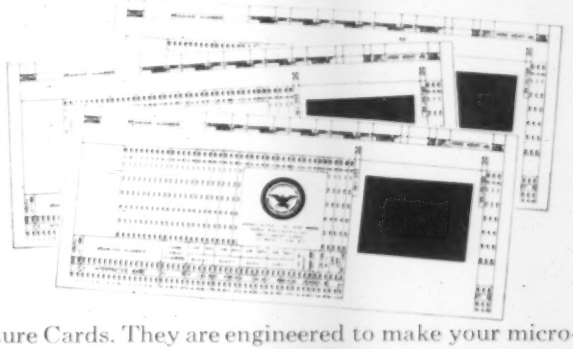
- The raw film stock used in microfilm;
- The methods and techniques of microfilming engineering data for the Armed Forces;
- The formats of the tabulating cards used to generate aperture cards;
- The formats of the aperture cards used as carriers for the microfilm data;
- The methods and techniques of mounting microfilm into aperture cards;
- The wide range of equipment to be used in the micro-reproduction system. This equipment includes microfilm cameras, testing equipment to inspect filmed engineering data, film mounters, film printers, and print-out units.

3M makes microfilm so easy to use

You can depend on 3M's continuing research, precision manufacturing, and standards-compatible products to make microfilm so easy to use.

FILMSORT Aperture Cards and Copy Cards, long used by Government and industry, are designed to meet the specifications and standards for the Engineering Data Micro-reproduction System. And now, to speed your use of FILMSORT Aperture Cards, 3M supplies both the printed card and the aperture. You save in shipping costs. You get your cards faster.

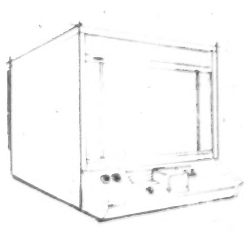
FILMSORT Microfilm Copiers, Mounters, and Readers are designed exclusively for Filmsort Aperture Cards. They are engineered to make your micro-reproduction system profitable.



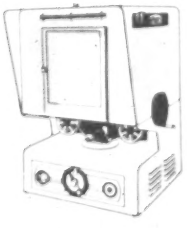
THERMO-FAX "Filmac 200" Reader-Printers make microfilm practical for industry and Government. The advantages of a reader and a printer are combined in one compact, low cost unit. Huge viewing screen . . . simple push-button operation . . . you can obtain copy after copy in 18" x 24" size, or half size prints, of engineering drawings and records from microfilm in FILMSORT Aperture Cards. The "Filmac 100" Reader-Printer delivers $8\frac{1}{2}$" x 11" copies in seconds.

For more information about the new Defense Department microfilm specifications and how they affect your business, mail the coupon right away.

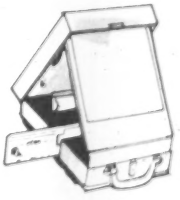
Modern Microfilm Products from 3M



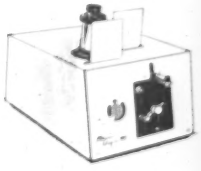
THERMO-FAX "Filmac 200" Reader-Printer



THERMO-FAX "Filmac 100" Reader-Printer



FILMSORT "Inspector-50" Reader



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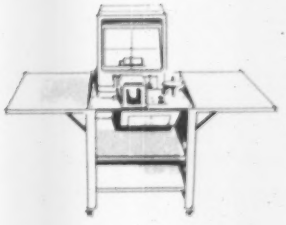

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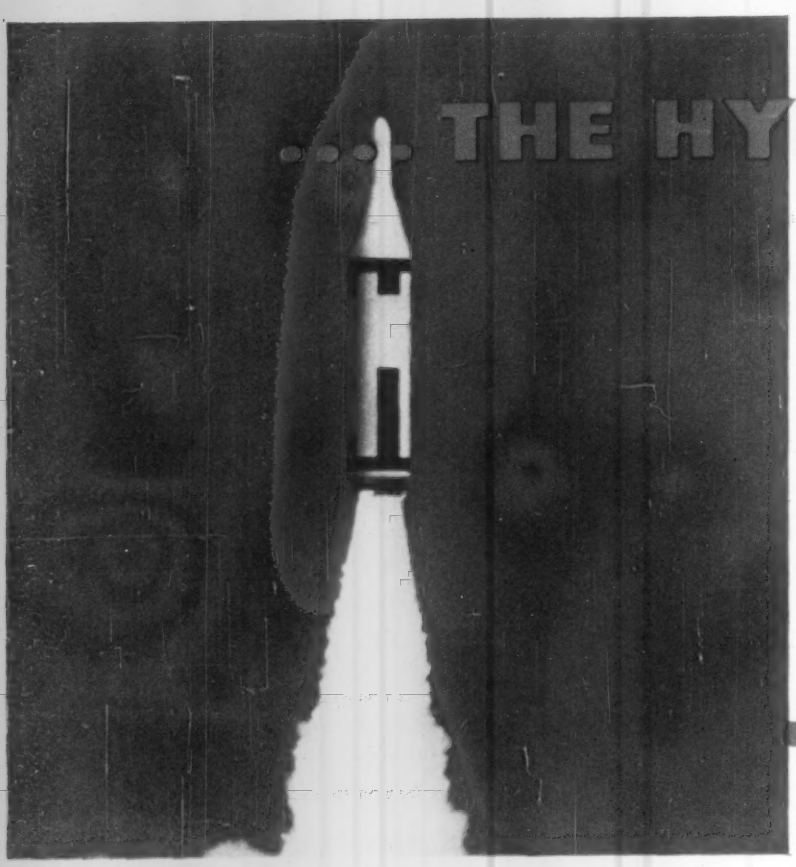

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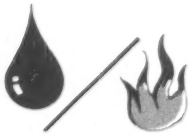

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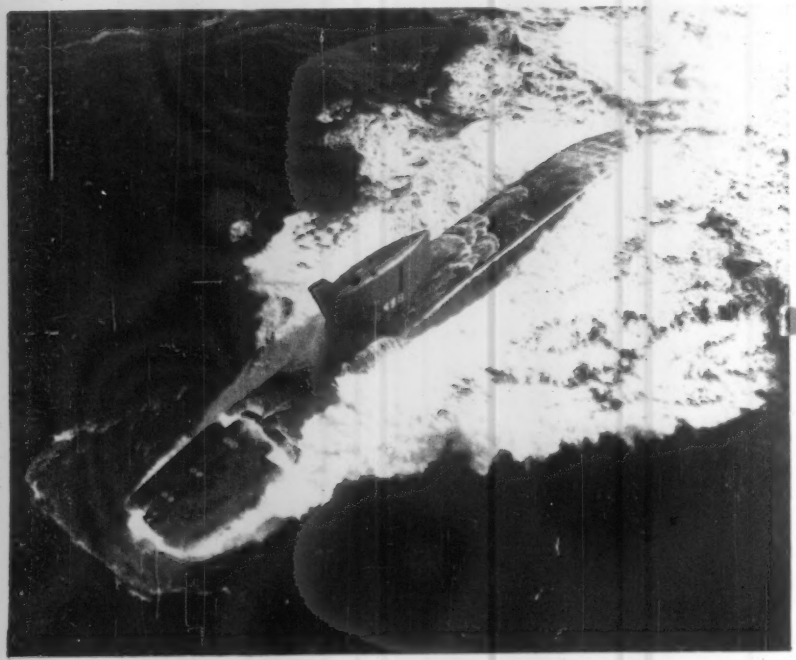

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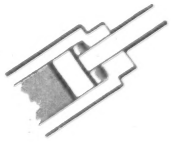

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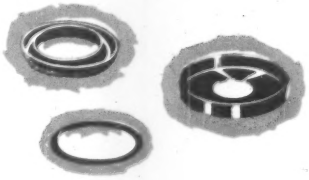

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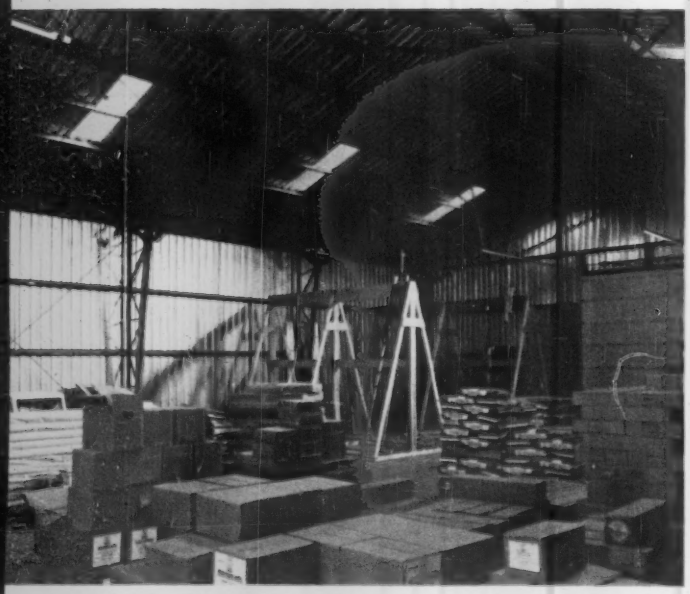

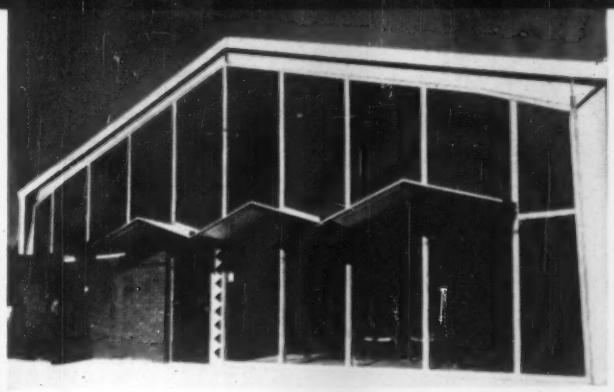

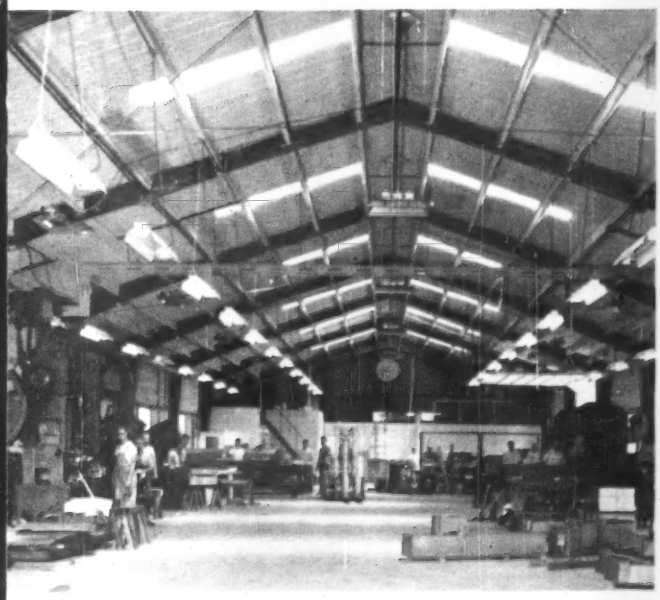

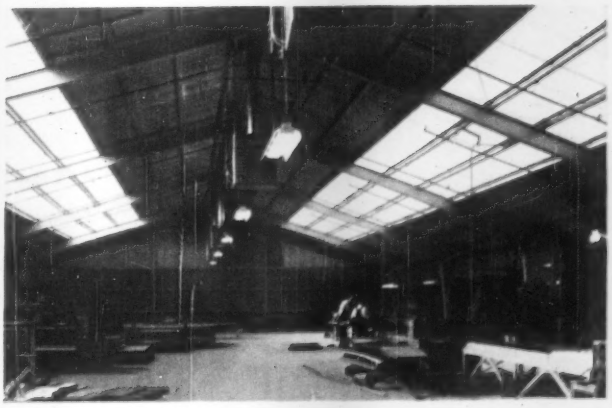

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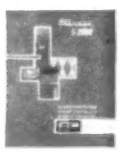

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DUN'S REVIEW
AND MODERN INDUSTRY
June 1960

EDITORIAL

A Matter of Degrees

Business men are interested in standards. They insist on quality control of materials, performance tests of machinery, and measurement of the craftsman's skills. But when they consider the standards upon which the scientist, the professional man, and the management generalist must be judged, the end often gets confused with the means. This confusion is especially apparent when the educational assets of a candidate for employment or promotion are being considered.

In recent years, perceptive personnel directors have tempered their attitude toward the degree as an overall measurement of a young man's talents. They look for other indications of character, growth, and intellect of the whole man, especially in selecting candidates with a managerial potential. This point of view needs to be communicated to the graduate himself, and occasionally to his scholastic counselors. Most of all, it should be communicated to top management, which all too often makes a policy of selecting men only from the upper 10 per cent of a graduating class. This narrow mathematical range may result in the rejection of potential leaders who fall through the illusory and often faulty mesh of degree patterns.

Let's get one thing straight. An educational degree is an honor, not a commodity. A degree in business administration, science, humanities, medicine, law, or divinity is evidence of time, energy, and intelligence applied to self-improvement. It is also a recognition of achievement, as measured by established standards of excellence in the field. As a basis for the recruitment of technicians and social scientists, the college degree is a necessary and highly desirable criterion. Degrees in economics and the humanities are significant in the selection of young men with management potential.

But the letters on the diploma are no guarantee of the executive capacity, moral fiber, or native wisdom essential to imaginative leadership. The B.S., M.A., and Ph.D. maintain their luster for those who have earned them, but they are no shelter for the man who knows all the answers without understanding the questions. There are no ready-made solutions to the human problems of management.

In the turbulence of technology, formalists in personnel selection have warped the significance of the college degree by imputing to it a set of values it was never intended to reflect. The fact that certain doors to advancement are opened only by a Phi Beta Kappa key constitutes an abuse of one of our noblest academic traditions. The all-too-plain dollar sign stamped on the degree in science or engineering cannot really be blamed on the educator, for it originated in industry's competitive efforts to get the keenest intellects available on the graduate honor rolls. As evidence, consider the lures dangled in advertisements for engineering graduates.

Industry needs specialists for technology and research, both in our defense effort and in the development of new civilian products in an era of changing methods. Eventually, some of these men will evolve into candidates for managerial responsibility. But the managers of the future cannot come from their ranks alone. Industry needs just as urgently the well-rounded individual who has the long-term outlook necessary in a good manager. Such a man usually has a college degree—but more important than a degree are certain human attributes not easily calibrated by letters of the alphabet—identifiable qualities of understanding and compassion that are related to the total human experience.

If a degree is an honor, let's regard it as such and remind the graduate of this fact when he puts his best foot forward in a competitive world.

THE FOLKLORE OF MANAGEMENT: VI

The Myth of the Communist Superman

CLARENCE B. RANDALL

No business man succeeds in competition without the self-confidence that comes from knowing his own strong points, his rivals' weaknesses. Yet many of us, alert to the Soviet threat, are foolishly afraid of learning the truth about the Communist system.

HOW LITTLE we American business men really know about Communism!

We damn it and we fear it—but we consistently refuse to study it.

In fact, there was a time, and it was not so very long ago, when if a young man had been caught reading Karl Marx he would have been fired out of hand. Even if it had been the boss himself, a whispering campaign would have started that would eventually have compelled him to resign from his club.

I have seen this strange phenomenon go full cycle. As a junior at Harvard in 1911, I was assigned *Das Kapital* as a subject upon which to write a paper. I remember it well, for I entitled my report "Marx and Remarks," a wisecrack which my instructor later told me was responsible for my getting an A minus instead of a B plus in the course. At that time I thought no more of studying Marx than I did of reading De Tocqueville—and I still wish that we could occasionally laugh about Communism instead of always getting so lathered up over it.

Twenty years later, when I was president of a school board, I was severely criticized for opposing the removal of *Das Kapital* from the school library.

And people still point the finger of scorn at me because during the dark days of the last war I made a speech on behalf of Russian War Relief, in which I said that blood shed in front of Stalingrad in the struggle against Hitler was blood shed for me in Chicago.

Even today, when voices are calming down a bit as we adjust to the Communist challenge, I can think of no American business man who will admit that he has studied either the philosophy or the practices of Communism.

This is not like us, and I do not quite understand it. In the day-to-day operations of our companies, we invariably keep our eyes on the competition. We get hold of copies of the other fellow's catalogue and read it eagerly, page by page. As soon as his new model comes out, we rush one over to the shop so that the boys can take it apart and make a full report. We hire pollsters to find out whether our rival is getting across to the public better than we are. And it would be strange conduct indeed if we should fire a salesman because he asked a dealer what he thought of the other company's merchandise.

We don't behave that way in the field of politics, or religion either. It is still safe—in most places—for a Republican to have lunch with a Democrat, and a Christian minister or priest may study Buddhism or read the Koran without being charged with sacrilege.

But the practitioner of free enterprise who sets out to form his own opinion as to what chance Communism has to supplant our way of life—by examining its tenets and observing its programs—runs great risk of being branded as a subversive.

This attitude is unhealthy. It is cowardice, not strength. It is the abandonment of our tradition of free

inquiry. It is the true unAmericanism.

When Khrushchev says he will bury us, we should not get angry. We should gird up our loins and join battle with a cheer, with the banners flying and our breastplates burnished brightly. And not the battle of missiles only—the battle for men's minds the world around as well. We badly need lusty new champions in dialectics—men who love a fight, men who can take Communism apart ideologically and expose it for the social madness that it is, men who know the weakness of the enemy as well as they do our own dynamic resourcefulness. We have nothing to fear but our own unwillingness to let the issue be joined. And for a nation of salesmen this is a surprising limitation.

What could be more absurd, for example, than the pompous Communist propaganda that the empty doctrine they offer to a weary and impoverished world is either original or revolutionary? Or that Marx, Lenin, and Stalin were prophets who proclaimed a new social order?

Revolutionary? What is novel about tyranny? Since that remote day when the first caveman went round the intervening rock and successfully clobbered his neighbor because he was stronger and carried a bigger stick, evil men have oppressed the weak. The so-called Communist revolution brought nothing to the world but the reincarnation of old wrongs.

We must expose this fraud, and declare to all mankind that the real revolution in human affairs is the lucent, dynamic concept of the dignity of man, of freedom for the individual, which finds its fullest expression here in the United States. The end of tyranny—not its perpetuation—is our contribution to history.

Our attitude towards the study of Communism is cowardly and unhealthy. It is the true un-Americanism.

We must not stop there, however. That is only the first plank in our platform.

If we would permit ourselves to study this alien philosophy thoughtfully, we would probably have to admit that, theoretically at least, Communism could exist as a social order apart from tyranny. It is conceivable that a new nation, formed by honest men who had surveyed the way of life in each of the other states, could adopt Communism by the full exercise of democratic procedures and voluntarily live by its ideas.

They would be wrong. But if we are to hold our own in the cosmic debate now going on in the remote areas of the world, we need to know *why* they would be wrong.

Let us stand on the record. Let us first make it clear that our goal is not production for the sake of the goods, not religion for the advancement of a particular faith—nor for the denial of faith, not education for the glorification of the state. Instead, we aim to permit each citizen to achieve the utmost fulfillment in his own life of those objectives which he himself has chosen.

All this we have done superbly.

The purpose of our production is to free the individual for the pursuit of the good life as he sees the good life. And, in retrospect, what we have achieved is incredible. No other social order yet conceived by man can match what we have done.

Our gross national product has passed the level of $500 billion per year, for a nation of 175 million people, and it is doubling every 22 years. In the statistical period of fourteen years since the passage of the Federal Employment Act, employment generated by the people themselves and not artificially created by the state has advanced, on the average, by nearly 800,000 per year, while the nation's output of goods and services has increased by more than 50 per cent. What could be more revolutionary than that?

When we reflect upon the crowded living quarters—intolerable by American standards—which are the lot of most Soviet workers, let us remember that in this same period we have built 15 million new private non-farm dwelling units, and that 60 per cent of all non-farm dwelling units are owned by those who live in them. What shall it profit a nation to shoot the moon if two families must double up in a single apartment?

The more we can learn about what goes on inside Russia, the better we will be able to document the superiority of our system. By our standards, and when measured against the physical comfort and durable satisfactions of their people, the Soviets have devoted a disproportionate amount of their gross national product to missile development and grandstand plays in the field of astrophysics.

We never hear the Kremlin boast of the number of new automobile registrations. Not even they would dare do that, for the most casual visitor invariably reports that Russian streets and highways are barren of traffic. Only the élite, only the privileged in their classless society, have private cars. There are no parking lots outside the steel plant at Magnitogorsk, and no two-car garages in the Moscow suburbs.

When Khrushchev says he will bury us, we should gird up our loins and join the battle with a cheer.

In fact, there are hardly any suburbs in our sense. Mr. K. made it quite clear, when he was in this country, that by concentrating working families in huge agglomerations of utility apartments near their place of employment, he could save for the state the vast sums which we "waste" on automobiles and roads. Fine for the state—but what about the people?

We should tell the world, too, that our tremendous surge of increased volume in production has been accompanied by an ever-widening distribution of the benefits of production and the responsibilities of ownership. Ingenious as the Communist technicians have been, there is one great invention which they have missed: They neither discovered nor copied our stock exchange. The share of stock as evidence of private ownership and individual participation in a great enterprise is still safely Western.

Our corporations now have about 12.5 million direct shareholders. And if we consider the stock held by pension trusts, insurance companies, and the like, it is probable that over 50 million Americans participate directly in the earnings of our industry. Most large companies now have more stockholders than employees, and by the same token, each year more and

more employees become stockholders.

That, in my view, is the most astounding economic revolution in all history. What nonsense, what effrontery to hurl the vulgar epithet "monopolists" at us! What empty boasting to claim that Communists discovered the principle of the people's ownership of the means of production!

Or compare the two systems in accumulation of the capital required to add to the means of production, which further raises the standard of living. What is so novel about the method employed by the Communists? Under their social order, the state merely appropriates to itself the surplus which it requires, taking it away from those who have made the effort without their consent. In the United States, each employed person makes his own decision as to whether he will consume or save. If he chooses thrift, he then makes another individual decision as to what form of investment he favors. The infinite multiplicity of these decisions makes up the force which determines the direction our economy will take. It is ours—not theirs—which is the true "People's Democracy."

The same difference is found when we compare the Communist system of education with that in a free America. Everything that we do in our schools and colleges is designed to benefit the individual; everything that they do is designed to benefit the state. We try to make it possible for all boys and girls to choose the intellectual discipline which will best suit their talents, as they themselves see those talents, to the end that their lives may be enriched as they advance toward the objectives which they themselves formulate. Not so with Communism. The state determines who shall be a scientist, a lawyer, an artist, or a nurse. If a wrong decision is made, the individual is irrevocably committed to a lifetime of frustration. No escape mechanism is available. This in itself must be a great loss in effectiveness, even for a collective regime. I once knew an apothecary who ultimately became president of a great corporation. In Russia he would have rolled pills and done nothing else till the day of his death. How clear it is that ours is the dynamic way, and theirs the unenlightened!

There is one thing on the positive side to be said about Communism. They are not afflicted with our weakness: They are not afraid to study our system. Soviet libraries undoubtedly contain many authentic works on capitalism, and there can be no doubt but that Soviet economists keep abreast of current American writing in the field of trade and production. When they engage in dialectics with visiting American business men, it is they, not we, who are the better informed.

We need lusty new champions in dialectics, men who can expose Communism for the social madness it really is.

There is hope for the future in the fact that, even against their will, they are being driven by implacable economic circumstance to move away from their basic philosophy toward ours. Karl Marx must be spinning rather violently in his grave these days. "To each man according to his need, and from each man according to his ability" is steadily giving way to reward proportionate to effort. The direct application of the principle of incentives is spreading rapidly throughout the Communist industrial system. In the large plants, at least, the whole unit receives a bonus for output in excess of quota, and within the organization the particular departments have their own group quotas and bonuses. There is also an astonishing spread between the salaries and perquisites that are assigned to the various echelons of authority.

Even with respect to home ownership, there are signs of a crack in their brittle concept of collectivism. It now appears that one of the inducements offered in recruiting workers for new plants in the far reaches of Siberia, where until recently no man has ever gone voluntarily, is the privilege of building or buying a home that may be retained as private property.

Conceivably, too, the production commissars are being compelled to move crudely toward the basic elements of a price system and cost accounting. In their nationwide production line, as a commodity moves from one plant to another for further processing—such as steel to a tractor factory—there obviously has to be some basis for crediting the first plant with output and charging the next with intake. Otherwise the bonus scheme would break down. You have to have a cost to start with if you are to measure the value of the added effort.

Similarly, in the field of foreign trade there has to be at least the crude outline of a price structure, particularly for buyers who deal with both West and East and want to make comparisons. The leaders of proud and highly nationalistic new nations are prone to the suspicion that other countries get a better deal. Communist traders know that to make a better proposition to India than to Burma is not a good way to win friends and influence people.

None of this is meant to suggest for a single moment that Communism is not still a great threat to world peace and to world economic stability. Quite the contrary. In the field of economic penetration the Soviets are tough, resourceful competitors. To hold our place in the world will require strong effort. But there is no cause for panic. They are no supermen. We can beat them, and on our own terms, if we will only fear them less and trust ourselves more.

One lesson we must learn from them, however. We must come to see as clearly as they do what it is that we believe, and must bring to the fulfillment of this revolutionary industrial faith of ours the same dedication of spirit and the same tirelessness of effort that they display in propagating theirs. END

Clarence B. Randall, who here urges renewed courage in our political battle against Marxism, in *The Communist Challenge to American Business*, published last fall, rallied impressive arguments to point out the opportunities open to us on the world-wide economic front. He brings to his invigorating point of view the experience gained during his many years with the Inland Steel Company, which he joined as a vice-president in 1925. He resigned as chairman of the board in 1956, when he became special assistant to President Eisenhower on foreign economic policy.

Cost reduction, one of management's perennial goals, is an urgent necessity in today's competitive race. How do you "sell" it in the shop and office? If you catch the interest of the rank and file, you'll find that . . .

Employee Teamwork Can Cut Your Costs

ROBERT NEWCOMB and MARG SAMMONS

ONE of the most alluring of management's goals is across-the-board cost reduction. Year in, year out the intensity of this corporate hope remains undiminished. Yet in probably 99 companies out of 100 it never really materializes.

This low batting average may be charged off to one glaring administrative oversight: management's failure to get the message across to employees.

Plant and office employees are often closest to the hole in the dike, and they should be furnished with the means to plug it. Naturally, not every cost reduction practice is within reach of the average employee, but there are many places where he can help.

And if he is told the need and shown the ways in which he can cooperate, he will give willing support. Don't raise an eyebrow at this: Employees are cooperating with cost reduction programs in plants all over the country.

Experienced companies know that cost reduction calls for a well-planned, carefully supervised program. A mere executive appeal won't do. Take one simple example: Management issues a notice asking that all the lights be turned off at the end of the working day. That night the request is on everyone's mind and at 5:01 the place is in darkness. Next Tuesday, half of the lights will be blazing again, and three days later everything will be back to normal, with no one remembering the "douse-the-lights" notice. In short: objective good, execution faulty.

In order to encourage employees, you must first gain their attention. (See box on page 45.) Sometimes this calls for the dramatic—some companies even offer substantial prizes in order to keep the cost reduction drive at fever-heat throughout the whole of the contest period, knowing that interest is apt to taper off if the campaign loses momentum.

In a campaign recently launched at Pitney-Bowes in Stamford, Conn., it was announced that the company had already commenced pruning budgets. Facts and figures were trotted out—such as the 15 per cent capital expenditure cut—to confirm the statement that the program was company-wide and was not confined solely to the plant.

Convair, at its Fort Worth plant, takes the "D" train to save supplies.

Spell it out

P-B defined seven ways in which the employee could specifically participate. These were no casual suggestions; they were the ABC's of cost reduction in plain English, with details in each case.

For example, after citing the actual annual cost of scrap and re-work, the company set a 50 per cent reduction as the current year's goal and noted that "some will argue that a few rejects must be measured against a day's or week's *good* production. They will add that some parts which don't pass inspection can be repaired. True, but that in itself adds to the cost of making these parts. Others have to be scrapped and, while some of their basic materials can be re-used, that doesn't begin to repay for the labor and other costs that went into the product in the first place."

Worthington Corp. has launched a full-scale "profit improvement" program from its headquarters at Harri-

son, N.J., and has issued management personnel a pocket-size manual that describes the entire program, from basic philosophy to practical tips on where to look for possible savings.

Worthington Corp. states realistically that it is not a program to be adopted only in times of lower profits, or a luxury to be discarded when profits increase, but is part of a continuing campaign to strengthen and improve the corporation's operating, financial, and competitive position.

Worthington has also set realistic ground rules: (1) The goal must be attainable; (2) it must be specific; (3) it must be assigned to specified people, who have a definite responsibility for carrying it out, and (4) it must be possible to measure progress on the target dates.

Sponsors of such programs always invite employees' suggestions, but too often fail to define what a cost reduction suggestion actually embraces.

Worthington set up five categories for improvements: material costs, machines and equipment, operations, overhead expenses, and merchandising. Under each heading are listed a dozen or more specifics.

In the operations improvement classification, for example, employees are urged to think in terms of reduction of idle machine and operator time, eliminating non-essential operations and unnecessary inspections; use of statistical quality control by selective sampling; improvement of materials handling and utilization of space; standardization of parts; reduction of absenteeism and turnover; elimination of accident hazards, and analysis of routings.

Companies are understandably gunshy about revealing figures in cost reduction campaigns, although awards for employee suggestions generally are publicized in the company press. One New England plant of a rubber company reported an idea worth $140,000. In contests, companies from time to time will announce the estimated value of a winning idea, projecting it over a period of years. Generally, however, savings are not made public.

Gimmicks are by no means uncommon. At the Convair division of General Dynamics Corp. in Fort Worth, Tex., a four-car "D Train" ("D" for "De-hoarding") made a daily round of the plant and grounds to pick up supplies and materials needlessly stored in desks and odd corners. The cars were labeled "Operating Supplies," "Stationery Supplies," and so on. During the tour, each section took an inventory of its own stock and contributed whatever it could. An early check disclosed that 90,000 pounds of material were collected, and the company put the value of just the recovered tools at $15,000.

The Santa Fe's cost reduction program is aimed at "better freight handling." The campaign was once defined as a "loss-and-damage prevention" drive, but the administrators discovered that the term had a slightly downbeat sound to employees. They adopted a new label with a more positive, specific approach.

The Santa Fe also uses gimmicks to enliven its campaigns. In one floor display, four products damaged in transit were shown, with price tags, and the current cost reduction contest features "The Monster," a faceless foe who is responsible for damage to shippers' merchandise en route.

The more a company keeps costs down, the more it realizes the need never to let up.

One manufacturing superintendent recently remarked, "We must recognize that we're in for a certain amount of breakage around here, a certain amount of careless workmanship, a certain degree of inefficiency in inspection. We're always going to get a percentage of our products returned —we expect that.

"So why do we carry on a constant campaign of cost reduction? Simply because we know that if we let up on it, our costs would very soon start going up again."

Organizing for Waste Control

This company found that giving a staff executive the over-all responsibility for cost reduction brings keener interest and better results.

In late 1957 the job of waste-control supervisor was created in the general production department at Bemis Brothers Bag Co. in St. Louis. The job is a staff assignment, and the supervisor reports to the vice-president and director of production. All communications devices at Bemis are involved in the cost reduction program.

The waste-control supervisor is in constant touch with the upper management group in the company's 32 manufacturing plants. He suggests, recommends, and advises on all aspects of waste control. He recommends material for bulletin boards and other types of promotion.

He also circulates good and usable ideas on cost control, sets up departmental conferences on waste problems, and sends out regular reports on waste statistics.

The Bemis employee magazine publishes several articles on waste control and cost reduction each year. One described a drive in progress at a plant in Washington. When the percentage of waste had been reduced to an agreed figure, and the figure maintained over a period of months, the employees were given a turkey dinner.

A short time after the story appeared, seven other Bemis plants embarked on campaigns, using charts to make employees more waste-conscious.

At a Bemis plant in Massachusetts, supervisors were questioned about the principal origins of waste, and an article was built around the pictures they recommended. At the Wilmington, Calif., plant, employee suggestions were publicized. At the Memphis plant, workers were invited to help launch the campaign by suggesting posters on waste reduction which were finished by professional artists.

The over-all controllable waste figure is down, Bemis reports, although the company hastens to add that there is still room for improvement.

THE AUTHORS are the man-and-wife management consulting firm of Newcomb & Sammons, specialists in employer-employee communications programs. They publish their own report, *The Score*, and their new book on employee communications will be issued this fall by Harper & Brothers.

Staging a Lively Campaign

What are the benchmarks that industry can follow in developing a cost reduction program? Some conservative employers may question the carnival character of certain techniques recommended below. Experienced hands in communications, however, recognize that cost reduction can be aided by employees in only one way—through participation. Culled from several successful campaigns around the country, here are some pointers you can put to use:

1. Plan a cost reduction campaign as carefully as you would an advertising campaign. Schedule it for a fixed period of time—six months is recommended. Give it a theme, with new angles of approach introduced at regular intervals. Use all means of communication within the company—the employee magazine, reports to supervisors, bulletin boards, and so on.

2. Bring supervisory personnel in at the earliest possible moment. Brief them on the costs of waste. Give them all the details of the program and invite ideas and comments. Point out ways in which they can help. Assure them they will be informed regularly—and in advance—of results. If the campaign involves some kind of contest, as many do, make sure that supervisors are asked to inform the winners in their own departments.

3. Include the family in any appeal for cost reduction. This can be accomplished through letters from the president (or, in multiplant companies, from the plant manager) to employees' homes. These should outline the need for cost reduction, underscoring the employees' stake in it. If contests, quizzes, or suggestion systems are utilized, the letters can encourage employees (and possibly their families) to take part.

4. Arrange for regular posters that point out ways to cut costs, what to look for, how to enter the contests. Supplement them with announcements and photos of winners receiving their awards. Post winning suggestions promptly, in order to stimulate the other employees. And congratulate, in person and by letter, departments that succeed in reducing costs.

5. Arrange contests between departments, with a dinner for employees who have effected the greatest savings.

6. Introduce a slogan contest, with the winning slogans used on company letterheads, newsletters, and in other appropriate spots—and the winners' photographs posted on bulletin boards.

7. Start a special newsletter, to be mailed to employees' homes, for the express purpose of reporting the results as the campaign progresses. Use the names of all who participate—the more names, the better.

8. Use "gimmicks," such as match folders with winning slogans, payroll inserts, and lists of winners on banners around the plant.

9. Show a display of rejects—of broken tools, sweepings from the floor. (Remember there's cost involved in discarded rubber bands, paper clips, and so on). Invite people to guess the cost of the accumulated waste and give a prize for the closest guess. Be sure to publicize *all* guesses, since the wide range will suggest that employees have little knowledge of actual costs.

10. Prepare a round-up article in the employee paper each month, along with photos and full credit to the participating employees.

11. Don't permit the campaign to lag. Keep it alive and exciting by constantly providing new promotional stimulants.

12. Finally, whenever possible, show figures that indicate improvement in the cost picture.

Communications men and women experienced in these campaigns feel that an appeal has little impact without definite, recognizable examples.

At Pan American Petroleum Corp., in Tulsa, Okla., employees were reminded of the "alarming increase of oil field operating costs" over the past five years and invited to join in a company-wide cost reduction campaign.

Like other companies with effective programs, Pan American Petroleum asked for direct employee aid.

One issue of the Pan American magazine emphasized reduced drilling costs and showed a saving of $4,300 per well through the use of "slim-hole" drilling. With another technique, drilling costs on an $85,000 well were cut $6,500. Frequent reminders and reports on specific savings (some of which the employees themselves had recommended) kept interest high.

Drive it home

Catching and keeping interest is not always easy. At times, it is necessary to devise some unusual twist. In one New England concern, employees were reminded in the company magazine at Christmastime how much more money some of them might have had for holiday spending if part of their income had not been lost through absenteeism.

This is possibly harsh therapy, but it seems to have worked. In the same company, lights were shut off for a moment just before closing time, to remind everyone to turn them off before going home.

At Sonoco Products Co., Hartsville, S.C., the management harnessed cost reduction to a "better methods" drive. To show how the campaign was progressing, a special issue of the *Methods Monthly* featured sound cost-saving suggestions which covered a variety of accepted ideas. Line drawings of "before" and "after" methods —along with a description of the improvements—were used. The special issue put it succinctly: "Material and parts cost reduction is another good way to increase Sonoco's profit and keep bread and butter on all our tables."

Sonoco, like other companies, has found the personal touch effective. Cost reduction will never become the favorite indoor sport of the typical American employee. But he will—and does—respond when the appeal is both attractive and clear. END

"We have made progress in applying the antitrust laws to union-inspired commercial restraints."

"Politics should have nothing to do with enforcement."

To find out what's behind Uncle Sam's tougher line on mergers, a DUN'S REVIEW *Washington editor interviews the go-getting young head of the Justice Department's Antitrust Division.*

An Inside Look at Antitrust

JOSEPH R. SLEVIN

SOME of the country's oldest corporations have been tangling lately with one of the Government's youngest high officials—and usually have been coming out second best. Their opponent: Robert A. Bicks, the nation's chief trustbuster. Bicks, a chunky former Yale football player, became Acting Assistant Attorney General in April, 1959, at the age of 31. President Eisenhower delayed nominating him for the post of Assistant Attorney General until early this May, some thirteen months after he actually began running the Justice Department's potent Antitrust Division. He is not only the youngest boss in the history of the Antitrust Division, he is also one of the most energetic. He filed a record 63 antitrust cases in 1959, and is well on his way toward a new peak of 90 for the current year.

Bicks calls himself a "quite conservative Republican," but his enthusiasm for enforcing the antitrust laws has aroused the antagonism of a number of powerful Republican politicians, with the result that he remained *Acting* Assistant Attorney General long after he should have had the job in his own right. An insistent political rumor has it that his vigorous enforcement efforts have cost the Republicans a small bagful of campaign contributions in this Presidential election year.

"I don't know whether that is true," Bicks said recently. "I would hope not, for the business community has a tremendous stake in effective antitrust. I would hope that the business community has profited from the lessons of Government ownership in other countries to the point where it is prepared to accept an antitrust program as essential to a free market."

Change of attitude

Bicks suggests that the record number of antitrust suits he has filed reflects a growing awareness of antitrust's importance.

"I think there is an increasing realization that the general approach of non-Government intervention and free market initiative works only if buttressed by a strong antitrust program."

"Have you been able to file all the antitrust cases you developed?" he was asked.

"Well, no, frankly. And this is as it should be. What is important is that this Division has never been unable to file a case for any but a reason that I considered quite legitimate: that is, the Attorney General—after a detailed study of evidence available—convinces all of us who may have worked up a case that we will not prevail in court. Attorney General Rogers is an extremely experienced lawyer and we prize his judgment. He has been a tremendously loyal boss."

The heart of Bicks' enforcement program is a burgeoning drive to block mergers that violate the antitrust laws. His chief weapon is Section VII of the Clayton Act, a provision that bars one company from acquiring another through the purchase of either stock or assets if the merger may substantially lessen competition or tend to create a monopoly in any line of commerce in any section of the country.

The husky trustbuster won his first major victory when the Federal courts barred a merger of Bethlehem Steel

"I went up and I argued before the judge."

"The criminal cases will have a deterrent effect."

"I would not sue when convinced that a merger was necessary to spur competition."

and Youngstown Sheet and Tube. Contemplated mergers of Texaco and Superior Oil and of two of the largest banks in the New Haven, Conn., area were abandoned during recent months when the Antitrust Division warned that it would sue. Sohio and Leonard Refineries gave up a merger plan several weeks after the trustbusters began court action. Other recent anti-merger actions have been directed at Kennecott Copper's acquisition of the Okonite Company, National Homes' acquisition of seven prefabricated house manufacturers, and General Motors' acquisition of Euclid Road Machinery.

The Government filed ten anti-merger cases last year. Bicks predicted that it will file twenty this year.

Preventive cure

"Section VII represents a prophylactic approach, an effort to proscribe mergers that will likely lead to monopoly," Bicks declared. "Section VII cases present structural issues to courts in more manageable bites than do Sherman Act monopoly cases. An advantage is the speed with which the cases can be tried. Antitrust cases do not improve with age. Bethlehem-Youngstown took thirteen months. Contrast that with the fifteen years Alcoa took under Section II of the Sherman Act.

"Another advantage is the increased likelihood of effective relief. The court has simply to enjoin a transaction yet untaken.

"Look at it from the point of view of respect for the law by the business community. This Department is able to say before companies merge that suit will follow. Business can take into account the legal consequences of merger action before the merger takes place, the legal consequence of suit by the United States.

"You can only bring a limited number of cases. The effect of each should be to guide members of the corporate bar when they advise clients as to how to live within the law."

"Are all mergers suspect?"

"No," Bicks said. "Mergers, generally, have ambiguous competitive consequences. In amending Section VII of the Clayton Act, Congress did not proscribe all acquisitions—but simply those that may substantially lessen competition or tend to monopoly in any line of commerce in any section of the country. The decision about whether or not to proceed in any one case depends on careful evaluation of its probable market consequences."

Bicks got up from his desk and began to pace back and forth. "The strength of antitrust," he said slowly, "stems from the fact that the laws are enforced by cases in court. The cases are decided by men of wide experience, men in close touch with community problems—and, because they are appointed for life, by men as immune as any men can be from concern with their own personal futures."

Existing monopolies

"In going after the mergers, are existing concentrations being left untouched?" he was asked.

"That is a good question. It was put up to me at a recent Bar Association meeting by a quite prominent lawyer who criticized the Division for not bringing more Section II monopoly divestiture cases. I asked him what case would he, were he head of the Antitrust Division, bring. He declined to name one."

"You are investigating General Motors before a New York grand jury, aren't you?"

"The grand jury is considering alleged violations in various industries where G.M., among others, plays a significant role. That is right."

The Government can file both civil and criminal antitrust cases. Mr. Bicks has been filing fewer criminal actions than his predecessors, but when he does he has been hitting hard. The Antitrust Division recently obtained indictments in Philadelphia against a number of leading electrical companies and their key officers.

Deliberate violations

"I would limit the criminal approach to cases where you have intentional, willful violations, where people knew they were violating the law and went ahead, and the likelihood of conviction is great," Bicks declared. "This is important in terms of deterrent effect on others. It's in that sector of willful market rigging that the criminal sanction has a role to play."

Bicks is using the antitrust laws' conspiracy provisions to get at labor racketeering. He has been moving against labor-management "sweetheart contracts," payoffs by employers to induce union officials to act against the best interests of their members, and phony unions.

But on the question of applying the antitrust laws to unions as unions, he has this to say: "Congress has traditionally considered these as labor management rather than as antitrust problems. Whatever else Congress decides it wants to make illegal in the labor-management field, it might do well to write it into a labor-management law rather than into an antitrust law." END

More manufacturers are trying a new approach to distribution problems—setting up their own wholesale groups, dealing direct with retailers. Does do-it-yourself wholesaling work?

Cutting Loose from the Wholesaler

A little more than one year ago, some 1,200 distributors throughout the nation received their last shipment of electric shavers from Schick, Inc. The top brass at that Lancaster, Pa., appliance manufacturing company had decided that the traditional method of distributing by wholesaler was not for them.

Shortly before, Schick had also discontinued trade-in allowances, and the company's new management announced that both moves were designed to "give all dealers a fair profit on the Schick line." President John J. Reidy commented: "The decision is only logical in view of the vast and significant changes which have taken place in merchandising during the last ten years.

"We believe that a manufacturer of products like ours—electric shavers as well as butane lighters—needs a wide coverage of both large and small retailers."

In March, 1959, Schick set up a Supply Division with 66 outlets to handle distribution to retailers. This, along with a Service Division, was created from a reorganized subsidiary, Schick Service, Inc.

Sales leap up

The results have been impressive. The number of supply division outlets had increased to 75 by the end of March, 1960. And according to F. D. Crews, Schick's general sales manager, sale of the company's products jumped 25 per cent in dollar volume from 1958 to 1959. He believes that the new plan is largely responsible and that an item like an electric shaver, which comes in only a few models, lends itself particularly well to such a company-directed distribution system.

Crews, who also says that the new method has helped put retail dealers back in business, points out that when they bought from wholesalers they never knew in advance what price they would have to pay for Schick products. Now all dealers pay the same price. But, he adds, they still have the option of selling the item for whatever price their overhead permits, or of using it as a loss leader if necessary.

Schick's tactics have been repeated, with variations, by a number of manufacturers. Some set up their own factory-controlled wholesale organizations. Others have eliminated the wholesale function entirely and sell directly to retailers.

The Gale Products Division of the Outboard Motor Corp. previously distributed its outboard motors through marine hardware and sporting goods wholesalers. Now it has dumped its distributor network in favor of a direct-from-factory-to-dealer program.

In explaining the change, Harold L. Bourdon, Outboard Motor vice-president, cited three principal objectives:

- To strengthen the market position of the company;
- To build stronger, more profitable retail outlets to cope with competitive marketing conditions;
- To improve service to the consumer.

Other companies have found that simplifying their distribution systems has brought them closer to the one man on whom their sales future depends—the consumer. Midas Muffler, Inc., decided to ignore the usual custom in the automotive parts field, where the manufacturer ships to the distributor, who then sells to the consumer. Midas now ships its mufflers, tail pipes, and other exhaust system parts to more than 300 franchised outlets in 41 states. These outlets use large quantities of relatively few parts, which they install for the customer—thus combining the functions of wholesaler, retailer, and service organization.

Probably the most dramatic example of streamlined distribution is offered by the M&B Headwear Company, Inc., a Richmond, Va., cap manufacturer. Last year, the 49-year-old company dumped the traditional system of salesman-wholesaler-showroom marketing in favor of a "wholesale self-service" arrangement.

Mail-order distribution

Selling is done through direct mail and trade advertising "without the assistance or persuasion of salesmen or distributors." Sample caps, swatches of different fabrics, and full pricing and delivery information are sent to store buyers.

The company says that this new method of placing orders—and cutting distribution costs—has produced "encouraging" results. According to Morris J. Milstein, M&B president, stores can sell the caps at 20 per cent less than comparable merchandise. He feels that a broad range of soft and hard goods can be sold in this manner—apparel, dry goods, home furnishings, appliances, housewares.

Many companies which have not entirely eliminated the distributor system have cut down sharply on the number of distributors.

The Sunbeam Corp., for example,

long operated on an informal "at-will, order-accepted" basis with wholesalers throughout the country.

Then came the explosive price war in the household electric appliances market, caused—in the words of C. O. Mendler, Sunbeam vice-president and general sales manager—by "the U.S. Supreme Court decision that threw the doors open wide to interstate cut-price mail-order advertising." Sunbeam was forced off Fair Trade, and when the smoke of the price war cleared away, it became evident that many dealers had grown weary of the furor and wary of legal complications.

"We had to recognize the hard fact," Mendler says, "that there were too many Sunbeam distributors in proportion to the number of Sunbeam retailers. We realized that we had to shrink our distribution system to a more practical size."

Price cutting and its frequent consequence—lack of brand identification—plague the radio and television parts companies, too. There are large numbers of distributors with no protected territories or limits of distribution who have to compete not only with each other but with manufacturers' representatives as well.

Protection for distributors

Disgusted with this situation, Channel Master Corp., maker of preassembled TV antennas, decided to set up a new system:

- It granted limited distribution areas on an exclusive or semi-exclusive basis to fewer distributors. In return for limiting themselves to Channel Master products, distributors were assured heavy advertising and promotional support, and protection against price cutting.
- The company agreed not to use manufacturer's representatives as a means of reaching the distributor. Instead, the factory salesman is the link between manufacturer and distributor.
- Salesmen who perform the function and have the title of "district sales managers" are given clearly defined territories, with the right to hire and fire distributors.

The new method has shortcomings. Competitors, using manufacturers' representatives, can get detailed coverage of every market. And Channel Master salesmen must be spread thin, with much time lost in travel.

But, according to Harold Harris, the company's vice-president, the limited distributor arrangement has been largely responsible for Channel Master's strong position in the field.

Says Harris: "Some of our competitors tried to do what we have done, but they failed because they didn't have the courage of their convictions. They installed a distributor set-up, sticking with exclusive territories until another distributor came along with a whopping big order. Then they just didn't have the guts to turn it down, and after this happened several times, their distributor set-up went out the window."

—AARON STERNFIELD

New Twist in Wholesaling

One radical change in the old-time distributor system has been the growth of rack jobbing, which popped up in the late 1940's and has been going strong ever since. It started when supermarket chain executives learned that many non-food items—housewares, children's books, small electrical products, hobby supplies, soft goods, and phonograph records—would move well. They did not, of course, want to pass up any profits—but they also did not want to keep non-food inventories and set up purchasing departments for these items.

Into the breach stepped the rack jobber, who delivers merchandise to the retailer, sets it up in floor stands, racks, cartons, or bins, and services the account regularly.

According to the American Rack Merchandisers Institute, a trade organization of more than 450 manufacturers and distributors, some 19,000 supermarkets are serviced in this manner. Most ARMI member manufacturers make housewares, place them in retail outlets—bypassing the wholesaler completely—and share the profits with the retailer.

The usual rack jobber, however, is a wholesaler who purchases, warehouses, pre-prices, sells, and delivers in small, less-than-case lots. He provides point-of-purchase displays. And periodically he picks up slow-moving merchandise for credit, thus assuring the retail operator of his full profit and preventing losses through clearance markdowns. The retailer doesn't have to do a thing but sell.

One major food chain, the Piggly Wiggly Midwest Food Company, tried and abandoned a direct buying system for non-food items. According to Larry Maher, Piggly Wiggly non-food division manager, the firm is increasing its 14 non-food departments to 25 and is depending exclusively on rack jobbers for distribution.

Another supermarket chain executive, Harley V. McNamara, president of the National Tea Company, puts it this way:

"Ours is first, last, and—until now—always a food business. Most of our executives have some 25 to 35 years of experience in the food field, but I doubt that we have any people on the executive staff who would call themselves experts in any non-food lines. We like to be sure when we invest our stockholders' money in facilities or inventories, and we don't like risk."

The ARMI says that rack jobbers' annual volume in supermarkets on housewares and other non-related food items jumped from $17.5 million in 1949 to an estimated $500 million last year.

As supermarkets go more and more heavily into non-food items, rack jobbing volume for 1960 should continue to boom.

RACK JOBBERS *keep the peg board stocked with housewares in supermarkets serviced by ARMI members.*

Here's a way to support higher sales without increasing your company's cash requirements.

You'll have a reserve to draw on—fast—when you want to expand to meet the competition.

You can keep expensive short-term borrowing to the minimum. And you'll make money besides.

Managing Your Corporate Cash for Profit

IN a growing number of corporations, profits are springing from an unlikely source—the treasurer's office. These earnings are small, to be sure, when compared to those generated by product sales. But today, in a time of tight money and narrow profit margins, unexpected income in any amount is especially welcome.

To begin with, companies have had to learn to get along with less and less cash. In the last five years, corporate sales have risen markedly. But corporate cash and security holdings have actually declined about 2.5 per cent. The ratio of cash assets to current liabilities—a key measure of corporate liquidity—today stands at 43 per cent, almost exactly the 1939 level. With this development, money costs have been going up and it has become harder to borrow.

Good cash management can enable a company to support higher sales without a corresponding increase in cash requirements. It can help cushion a sudden sales slump or meet tax payments. It can provide a reserve that allows a company to move fast to expand a plant, a research project, or an advertising campaign to meet a competitive threat. And it can help keep expensive short-term borrowings to a minimum.

The giants of the corporate community, like AT&T and General Electric, have long had sophisticated cash control systems. Their money managers squeeze every available dollar out of their organizational pipelines, reduce "idle" cash to a minimum, and make sure any excess cash is well invested.

Now medium-size and small outfits, traditionally blind to the advanced methods of corporate cash management, are studying how they too can make their cash work overtime.

The first and most basic step is to figure out what your company's cash requirements are, and just when they're expected to arise. Big companies set up both long- and short-range forecasts of cash income and outgo. For smaller companies, pinpoint accuracy and the formal machinery needed to achieve it aren't really necessary.

However detailed your forecast is, there are several variables to keep in mind. Some are obvious, such as cash and working capital restrictions related to loan agreements and the cash requirements of domestic and foreign subsidiaries. You should also be careful to keep your working capital at a high enough level so as not to undermine your credit ratings and, if your company is publicly owned, to maintain an adequate rating of your securities.

It's important to keep a reserve on hand as a hedge against emergencies and for shoring-up operations if your business drops off. GE, according to Paul E. Wallendorf, manager of banking and corporate finance services, maintains in its investment portfolio a highly liquid reserve of about $25 million.

Although a large reserve fund is often difficult for the small company to come by, this situation, says Weston Rankin, a partner in the accounting firm of Price, Waterhouse & Company, can be eased by careful cash planning.

What is the "right" balance?

Once your cash needs are outlined, you have to determine how much to keep in the bank. You must, of course, hold enough cash on deposit to keep your checks from bouncing. But you should also leave enough in the bank to compensate your banker for his services. Just what this should be is sometimes disputed between banks and their customers. Remember, it can be awkward to go rushing to your banker for a much-needed

loan if he feels you're squeezing him out of what he considers a fair profit.

The other extreme is letting demand deposits pile up. A forthright talk with your banker will help you determine the proper level.

Holding down your bank balance is tied to the problem of reducing the cash you need for day-to-day operations. The faster you can get your money to your bank, the faster you can use it. It may be four or five days from the time your customer drops a check in the mail to the time it's cleared and credited to you. If you could cut this "float" time in half, you'd have use of the money at least two days earlier. This can mean a lot if your own bills are pressing.

Checks go in the "lock-box"

The problem of excessive float is especially nettlesome for companies receiving a large number of payments from various sections of the country. At any one time, a considerable sum of money is *en route*. One plan for speeding these payments is the post-office box, or "lock-box," plan.

Under the lock-box system, customers mail payments to a post-office box near one of the company's main banks. The bank arranges to pick up the checks, sometimes hourly, and quickly credit the company's account.

GE's Hotpoint Division, which is located in the outskirts of Chicago, cut its float time by setting up a lock-box in the city. Previously, mail passed through Chicago for rerouting; then the division sent checks back through the local post office to get them to its city bank. Now the bank picks up the checks directly from the Chicago post-office box.

Another way to speed up the inflow of cash is by the freight payment plan. Under this system, the bank automatically credits the railroad or trucker and charges the shipper's account, advising both accordingly. The carrier pays the cost of the service, but this outlay is offset by the reduction in float time of payments. Of course, the shipper loses the benefit of the float he would normally get if he'd sent a check through the mail, but he saves the cost of writing and mailing the check.

For this plan to work properly, explains J. S. Lamb, assistant treasurer of the Chesapeake & Ohio Railway Company, most of the transportation companies and shippers within a particular region must participate and carry balances with the same bank.

Companies whose customers are dispersed over wide geographic areas may use a system called "area concentration." One big company has regional accounts in 20 banks, each serving a specific zone. The regional banks report by phone or wire every morning to one of the company's central banks in New York, and this in turn tells the treasurer the level of the regional balances. He can then drain off certain set excess balances in any of the area banks.

The area concentration system was opened for broader use not long ago by the installation of a nationwide network of teletype lines, linking major banks around the country. Funds can now be transferred almost instantly.

One variation of area concentration is called Automatic Cash Transfer. Under this system, branch offices or stores mail out-of-town checks directly to a central regional bank. Cash and local checks they deposit locally, mailing a check for the amount as a deposit to the regional bank. This cuts float on out-of-town checks by bypassing a stop at the local bank. What's more, it saves service charges on local collection of out-of-town checks. More important, it enables the company to lower local balances, while still maintaining them at levels consistent with the bank services the company draws on.

GE's Paul Wallendorf sums up the effort to do more business with less cash: "To accomplish this, you have to collect your cash as near to the point at which it originates as possible, then move it as soon as possible. Some companies even send a messenger to pick up a check for a big sum and rush it to the bank for deposit.

The other techniques for getting a better run for your money are drafts and guaranteed overdrafts. Use of a draft enables a company to make a payment the day it pleases. Its bank is instructed to honor the draft on a fixed date, instead of on demand as

To Make Your Cash Work Harder

- √ Determine in advance—six months to a year ahead, if possible—just what your cash needs will be.
- √ Set aside a reserve to take care of emergencies or a drop in business.
- √ Make sure your bank balances are no higher than they need be to keep your checks from bouncing and your banker from frowning.
- √ Do everything you can to get your bills out fast and your collections quickly credited to your account.
- √ Talk over with your banker what you can do to take advantage of "float"—the time your customers' checks are in transit, and the lag between the day you mail out your own checks and the day they're actually deducted from your account.
- √ Look into ways to spread out disbursements so that you retain the use of your cash as long as possible.
- √ Consider investing the difference between your total cash requirements and what you need to keep in the bank. Here again, check with your banker and your local securities dealers. They'll help you decide just what short-term investments are best for you.

If you follow these guidelines, you should be able to hold variations in your bank balances to a minimum. Whenever you need cash, even for emergency purposes, you'll have it ready at hand. And you'll end the year showing a profit on cash that might otherwise have remained idle and unproductive.

Investing in Government Agencies

A number of U.S. Government agencies issue bonds and notes that can be bought in amounts as small as $1,000 and held for almost any temporary period. These include the Federal Land Bank, Federal Home Loan Bank, Banks for Cooperatives, Federal National Mortgage Assn., and the Federal Intermediate Credit Bank. Yields on these securities run somewhat higher than those returned by Treasury bills. But they are slightly less marketable, and don't directly have the backing of the U.S. Treasury. However, "they are construed to be moral obligations of the U.S. Treasury," as R. N. Stillman explains in *The Controller*, official publication of the Controllers' Institute of America. "It is virtually unthinkable that the Federal Government would permit impairment of the credit standing of any of its agencies."

Here's how investment in Government agencies works out in practice. Let's say you have $10,000 you won't be needing until October. Running down the daily list of quotations supplied by a Government bond dealer, or the Government bond department of your bank, you find that the Federal Intermediate Credit Bank has outstanding $171 million in debentures maturing on October 3, 1960. Yield to maturity is 3.92 per cent. If you invested on June 6, 1960, and you hold to maturity, you end up roughly $260 ahead.

with a check. Banks usually charge 50 cents to $1.50 to collect a draft, but the price is often worth the sharply reduced float.

AT&T uses the guaranteed overdraft in the form of a "Field Draft Plan," an arrangement with a local bank by which the bank honors checks over a certain signature—even though the company has no account with the bank. The amount of the check is limited and is guaranteed by the company's regular bank. The company pays only a small fee for the service.

The longer a company holds on to its money, the longer it can keep its cash working. This means paying bills as late as it can without losing the discount, or it can mean doling out funds in dribs and drabs instead of all at once. An example of how this works in practice is described by John Shaw, assistant treasurer for Gulf Oil Corp. His company used to distribute working funds to its divisional field departments on a weekly or semi-weekly basis. Now, daily requisitions are required.

You can see how this works out by looking at a few figures. If ten offices require $500,000 a week each, a total of $5 million might be moved out of the company coffers in one sweep. By staggering the distribution daily, only $1 million or so moves out on any given day. By the end of the week, the company has freed the equivalent of $10 million for one day. At 3 per cent interest, this earns over $42,000 a year.

A company must also see that its internal accounting practices are efficient and precise. Veteran accountants are always surprised when they find companies neglecting to pay bills quickly, since a 2 per cent discount for payment within ten days is the equivalent of a 36 per cent annual return on investment.

After you reduce your cash requirements, and figure what you'll need to keep your checks from bouncing and your banks happy, you should be prepared to invest what's left. The sum you want to set aside for an emergency reserve should be invested in the safest and most highly liquid securities. You can invest the rest of your cash in securities whose maturity dates correspond with the dates you'll be writing checks against the cash they represent.

The time required to manage a short-term portfolio varies widely with its size and diversity, and the investment skill of the man handling it. One authority estimates that to manage a diversified, $50 million portfolio would take one man an average of 10 hours a week. AT&T and Standard Oil of New Jersey have men assigned full time to the job of managing portfolios of $1 billion each.

Big or small, if interested in short-term investments, a company should seek the advice of a major bank, a Government securities dealer, and a commercial paper broker.

The most common temporary investment is in U.S. Treasury bills, the next best thing to actual cash, which come in denominations as low as $1,000. These are auctioned weekly in 91-day and 182-day maturities, with a series of longer maturities auctioned at quarterly intervals. The bill rate this spring went up as high as 4 per cent on 91-day bills.

Larger companies enter into repurchase agreements on Treasury bills, buying the bills from a dealer if he guarantees to buy them back immediately on request. A company can invest its money this way over a weekend and the return is usually better than bill rates, but only companies with large sums to invest—usually $1 million or more—can do it.

Today, even individual investors are taking up the 30-day to 270-day notes of leading U.S. corporations. This investment is especially attractive because you can time maturation precisely with the date you'll be needing your money in hand. Typical yields this spring ran around 4¼ per cent. For example, $10,000 invested in 120-day paper returned about $158 in interest.

Where do you buy?

Big finance companies, such as General Motors Acceptance Corp. and CIT Financial Corp., sell their own paper directly to big investors. But the notes of industrial concerns and smaller finance companies are sold through dealers.

Small investors as well as big ones can invest in the bonds and notes of U.S. Government agencies (see box). There are a number of other investments that meet the basic requirements of safety and liquidity, but most of them are for the expert.

The over-all job of cash management varies in complexity with the size and character of the company's business, and with the amount of effort it is willing to expend on the task. But chances are, no matter what kind of company it is, a relatively small investment in time will most likely pay for itself, and substantially improve the financial stability of its operations.

—Albert C. Lasher

SPECIAL REPORT TO MANAGEMENT

Transportation Dilemma: *The Way Out*

Roadblocks to Progress

Despite the heavy investment both carriers and shippers have made in recent years, transportation is eating up a larger share of industry's sales dollar than ever before. A new DUN'S REVIEW survey of transportation policies and practices in manufacturing companies pinpoints the specific problems —and the latest solutions. **54**

Double Trouble - - The Impact of Regulation

Many industrial traffic executives claim that regulatory restrictions drive transportation costs way up. How are companies hampered by regulations? And what can be done to reduce their impact on the individual shipper? **68**

Tangled Traffic Slows Shipments

Moving 20th-century trucks through 19th-century cities is a trying problem. The efficiencies achieved in long hauls with up-to-date equipment are frequently offset by the traffic snarls in metropolitan areas. Efficient transportation for industry will hinge on how vigorously and promptly this problem is attacked. **89**

Featherbedding Pads the Bill

Archaic work rules are holding back transportation progress, adding many millions to industry's freight bill. How can industrial management help eliminate them? **111**

New Approaches to Transportation Management

Five detailed case histories show what companies today can actually do to streamline their traffic operations, reduce shipping costs. **125**

TRANSPORTATION DILEMMA

Roadblocks to Progress

Top management now knows that only strenuous efforts will reduce the third largest cost of doing business—transportation. The result: new organizational setups, added emphasis on the traffic man's role, radical shifts in the use of carriers.

BALLOONING steadily in recent years, the nation's transportation bill is now running at the rate of $100 billion, according to the most reliable estimates. Despite the heavy spending for improved facilities during the last decade, most companies now say that what they spend for goods on the move takes an increasingly larger share of the sales dollar.

A lot could be saved by improving the regulatory climate, cutting down on featherbedding, and unjamming our streets and highways. But top management's immediate concern is to remove the roadblocks to better transportation within its own organization.

This calls for taking a fresh approach to basic distribution policies. Many companies are doing just that right now. The result has been evident in new organizational setups which allow management to get a good grasp on the total function of physical distribution, and in management's eagerness to make use of new advances in transportation technique —piggyback, for instance, so far this year is running about 42 per cent above the 1959 level.

The changing technology of transportation, as reflected in the heady growth of piggyback and containerization (see DUN'S REVIEW, June 1959, page 63), is also placing more pressure on the traffic manager in industry. It is he who must be able to adapt his company's transportation policies to the changes that are fast taking place in methods of moving goods.

To find out what management is doing—and can do—to speed shipments and cut costs, DUN'S REVIEW conducted a new, intensive survey of traffic management in manufacturers of all sizes. (For details, see page 65.)

It revealed that perhaps the most significant change during the past few years has been the shift of investment in transportation from carriers: Manufacturing companies now own much more of the resources of transportation than in the past. This means that decisions about transportation operations fall increasingly within the province of corporate management. Informed estimates are that about two-thirds of all intercity ton-miles over the highways are now handled by industry's own truck fleets.

A company's own truck fleet can produce important benefits both in service and in reduced costs. For instance, the general traffic manager of

This Special Report to Management was prepared under the direction of Thomas Kenny, assisted by Melvin Mandell and Joseph R. Marshall.

the John Wood Company, a Pennsylvania producer of water heaters, tanks, and furnaces, says: "By establishing a fleet of leased trucks, we have reduced our yearly transportation costs by more than $100,000."

The traffic executives surveyed, however, still consider rate reductions to be the biggest source of savings. For instance, a larger producer of synthetic fibers realized a saving of more than $1 million from 42 rate proposals that were approved.

Asked to pinpoint the areas in which they had realized the most savings in transportation costs last year, the traffic managers also mentioned piggyback, containerization, and shippers' associations. And they cited these specific areas more frequently than in previous years.

A Midwest rubber company has made important savings by joining a shippers' association to make use of piggyback. The traffic manager says that he has been able to bring the freight bill down to 25 per cent of the less-than-truckload rate on one movement.

Little changes, too, can add up to important savings at the end of the year. Reports the traffic manager of a multi-plant apparel manufacturer: "We audit our freight bills before they are paid. Payments now are made from a central location instead of from each plant, which has practically eliminated all errors in rates, weights, and charges on freight bills."

Several of the surveyed companies are attacking the problem of paperwork, which has long been a roadblock in traffic operations. The traffic manager of a Minneapolis producer of machinery announces that his department will use punched card equipment for the first time this year, to take the place of traffic analysts whom he would otherwise have had to hire.

Stretching the dollars

During the past year, many of the surveyed traffic managers were able to stretch their transportation spending so as to produce better results for their companies. Despite the use of new transportation techniques, most of the steps they took to save money were not new—rate negotiations, consolidating shipments, changing classifications, reducing demurrage and the like. (See DUN'S REVIEW, June 1958, page 68, and June 1959, page 102.)

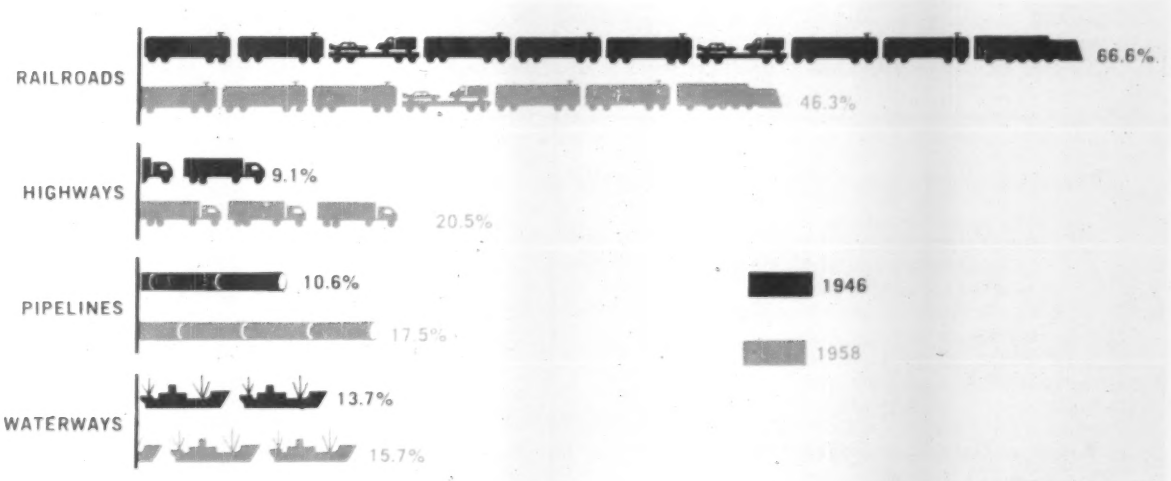
According to the surveyed traffic managers, the major transportation problems facing their companies at the present time are unsatisfactory service from carriers and constantly rising rates, particularly on small shipments. As a consequence, a good number of the companies are planning to take on their own truck fleets —either company-owned or leased.

But despite the many plans for long-range improvements, there is still much room for improvement in day-to-day operations in most traffic departments. In the majority of the reports traffic management makes to top management, the item that appears most frequently is the savings that have been achieved by consolidation of small shipments—evidence that much remains to be done to improve the scheduling of shipments.

The traffic managers also point to another continuing problem—the need for improved coordination of traffic with production planning and sales policies. And they cite the need

How does industry move its products?

Proportionately, the rails are losing out to other carriers as industry puts on the pressure for economy in transportation.



Although railroad ton-miles remained relatively constant—602 billion in 1946 against 559 billion in 1958 (the most recent year for which data are available)—they accounted for a smaller share of the total 1,206.6 intercity ton-miles. The total was up 33.5 per cent over 1946, but the rails' share fell from 66.6 to 46.3 per cent by 1958.

Truck ton-miles rose to 247 billion which is 20.6 per cent of the total. The ratio of 7.3 railroad ton-miles to every truck ton-mile in 1946 fell to 2.3 to 1 in 1958. This change is accounted for by industry's own truck fleets.

Package express service has become increasingly popular, both as a service to shippers and as a source of income for bus operators. Between 1948 and 1958, the revenue bus operators drew from package express rose from $5.1 million to $23.8 million, a much larger rise than that in passenger service revenue. During 1959, the revenue from package express of the largest operator, Greyhound, increased 22 per cent to $19.3 million.

Although air carriers accounted for only 0.048 per cent of all intercity ton-miles, the 1958 total of 579 million was up about 500 per cent since 1946.

for top management recognition as a long-standing deficiency that has been much improved in recent years but still needs attention.

The ability of private industry to buy or lease its own truck fleets, piggyback flatcars, and other special equipment is providing a flexibility that calls for more imaginative traffic management than ever before—yet according to the overwhelming majority of the surveyed traffic managers, top management throughout industry still is not fully aware of the real value of a well-organized, efficient traffic department.

Many, however, hope that this situation will improve during the next few years. Says the traffic manager of a Florida chemical company: "The traffic manager in successful companies will be given more administrative authority out of sheer necessity. Management will soon realize that traffic is a pirate's cove of savings and profits for hard-pressed treasure hunters."

Proportionately more of the traffic managers in industries where transportation is a heavy expense—chemicals, primary metals production—think that top management already recognizes their contribution to their companies. But 181 of all the transportation experts surveyed feel a lack of management recognition. Only 39 dissented from this view. Only four of the 29 food company traffic managers and four of those in the 25 machinery manufacturing companies represented believe top management is fully aware of their value.

The sense of being fully appreciated is more marked among traffic managers in concerns with sales under $10 million than it is in bigger companies. About one in four in the small companies believes management awards them proper recognition, compared with only one in eight of the traffic managers in companies with sales between $10 million and $100 million. The proportion was one in six for companies with sales of $100 million and over.

Why the blind spot?

If the traffic men are right in their estimation, why does top management in many companies still fail to recognize the full value of a smooth-working traffic department?

First of all, it has traditionally regarded freight costs as a necessary evil about which little could be done. In reality they are variable costs, capable of significant modification. But, preoccupied with the more immediate problems of production and sales, management has not always had time to analyze the data traffic presents, if indeed they ever reach the top level. The traffic manager's function has too often been considered as an adjunct of shipping, rather than as a wide-ranging service.

Also, because of traditional accounting practices, top management is often unable to pinpoint total company spending for transportation. In many companies, management has completely overlooked the dimensions of distribution costs, since they are hidden in many areas and not easily grasped in total.

Contributing to management's neglect of traffic's potential has been the very nature of the traffic department's operations. Many times traffic managers have found it difficult to explain the intricacies of rates and ratings, classes and classifications, tariffs, and other arcane items. Says the traffic manager of a Midwest chemical producer: "Top management often is unaware of the problems the traffic department has in dealing with transportation companies that are caught in a maze of regulations."

Confesses the director of traffic of a New Jersey manufacturer of paper products: "We have gotten our field so thoroughly complex, regulated, and individualized that we are now tagged as being mystical specialists. The gobbledygook language we use in talking about our work causes management to erect a mental block and back away from us. Simple clarity is far too foreign to the business of traffic management."

Tied to this is the failure of many traffic managers to develop accurate and easily understandable measuring devices that would reveal without deep study whether or not the company is getting maximum benefits from what it spends on transportation.

Behind the times

Another self-critic is the traffic manager of a Midwest steel producer, who says: "Traffic managers have been reluctant to keep pace with new ideas and new trends in industry. When changes have to be forced on the traffic department, management begins to doubt the value of the traffic manager."

Yet almost all of the surveyed traffic managers have been trying to develop standards of performance that will enable top management to measure the traffic department's efficiency. Most commonly, they prepare an annual report—frequently it is supplemented by quarterly reports as

Roadblocks to Transportation Progress

Apart from the problems of traffic management's organizational status and lack of a professional standard, here—in the opinion of the 221 traffic executives surveyed by DUN'S REVIEW—are the chief obstacles to progress in transportation today. No. 1 villain: Government regulation.

	Order of importance						
	#1	#2	#3	#4	#5	#6	#7
Excessive Government regulation	55	27	23	18	12	8	11
Featherbedding by union employees engaged in moving goods	33	36	26	15	10	17	11
Lack of cooperation among carriers	26	25	40	23	17	13	4
Complicated rate structures	17	39	42	27	16	12	4
Excessive paperwork	2	12	18	22	22	16	25

well—that summarizes the activities of the traffic department and puts particular stress on the "savings" achieved through rate reductions. Often the reports also give data on freight overcharges recovered, damage claims collected, demurrage costs reduced, and the like.

The reports may also include data on the freight cost as a percentage of sales, but this information can be deceptive unless it takes into account all the other elements of physical distribution. For instance, the percentage can be made to decrease by shipping in larger lots and increasing the amount spent for warehousing at the distribution point. Often, of course, extra spending for warehousing can cut the total bill for physical distribution, but each situation has to be analyzed carefully.

Some traffic managers are not sure that their reports—technical and lengthy by their very nature—get equal time in the fast shuffle of papers that land on the desk of the time-short top man. Says the traffic manager of a Midwest building materials manufacturer: "I turn in monthly reports showing the savings made on rates I have secured. This runs to nearly $100,000 a year. But I have yet to be complimented."

Perhaps the lack of top management appreciation is due to a debasement of the currency of accomplishment. Perhaps the extraordinary amounts claimed in savings tend more to confuse than to impress. And perhaps the very fact that such large amounts are waiting around to be recovered makes management suspect that all was not right with traffic to begin with.

No way to compare

The director of a major manufacturer of paper products puts it this way: "Suppose a traffic department saves $300,000 a year through rate adjustments, consolidation of small shipments, and so on. How does top management know whether the traffic manager has done a terrific job or just an ordinary one? Maybe the traffic manager of a comparable company, through harder work and greater brain effort, has saved $400,000, while another has produced a saving of only $200,000. All the figures may be big, but their mere size does not indicate either excellence or mediocrity.

"The over-all efficiency of a traffic department," he continues, "can

Manufacturers Switch their Transportation Spending to New Modes

	Number of Companies		
	Increased	Decreased	No Change
Contract carrier motor trucks	42	19	20
Common carrier motor trucks	108	33	31
Company-operated trucks	43	13	17
Company-owned planes	4	0	2
Inland waterways shipping	20	7	10
Coastwise shiplines	11	14	12
Air Parcel Post	14	6	24
Railroads	34	109	26
Air freight	38	15	25
Air Express	17	10	30
Parcel Post	21	27	54
Railway Express	23	41	41
Pipelines	1	1	3

Here is how the 221 surveyed manufacturing companies changed the pattern of their outbound freight expenditures between 1955 and 1960. The figures above show relative changes, not absolute increases or decreases in the amount spent. Companies queried were asked to indicate the percentage of their total outbound freight expenditure that went for each type of carrier in the two years.

The companies that spent a larger share of their total freight bill for air freight and Air Express in 1960 than they did five years ago cut back on the share given to other carriers. Most frequently it was the relative spending for less-than-carload rail transportation that was reduced. A rundown of the carriers that were cut back by 42 companies that increased the share of total freight expenditures for air freight and Air Express shows:

	Number of Companies
Railroads	26
Railway Express	16
Contract motor carrier	9
Common motor carrier	5
Company-operated trucks	5
Coastwise water carrier	3
Parcel Post	2

Proportionately more of the small companies (under $5 million sales) and very large companies ($100 million and over sales) increased the share of their spending for company-operated trucks (either owned or leased) than did those in the middle-size brackets. Here are the carriers that were given a smaller share of total company spending on freight by the 41 companies that spent more on company trucking:

	Number of Companies
Railroads	26
Common motor carriers	11
Contract motor carriers	11
Railway Express	9
Parcel Post	2

Among the surveyed companies, 101 of those who decreased their relative spending for railroad service also increased the proportionate volume of traffic given to trucking companies, either contract or common carriers.

None of these figures is meant to indicate that the companies are necessarily spending a smaller amount for any particular carrier's service now than they did in 1955, since total freight expenditure have increased during the five-year period.

be measured only by comparing one company with another. Traffic departments shouldn't be setting their own standards of performance. We would be unrealistic if we thought the traffic manager would not establish standards that he could be sure to attain."

Although savings achieved are still the major accomplishment described in reports to top management, the traffic manager of a medium-size chemical company announces his department has varied the emphasis: "In our reports to management we have abandoned the old criterion of savings and now deal more with the success of certain specific phases of company operations, such as a change in distribution methods."

There are a number of obvious clues to the efficiency or inefficiency of a traffic department. If the complaints from the sales department about delayed deliveries to customers are relatively sparse, things can be assumed to be going fairly well—unless, of course, there is also a big bill for a premium transportation.

An audit of freight bills, made by a service bureau, will frequently indicate negligence. High damage claims resulting from inadequate packaging can also be a danger sign.

Many of the surveyed traffic managers think that top management's lack of appreciation for a job well done can often be traced to the traffic managers' failure to sell themselves properly to the higher echelons. Says David M. Daly, Bristol-Myers' director of traffic: "Where you find a strong traffic department, you will find a strong traffic man, one who has convinced his management of the value of his department's service."

Out of touch with the top

According to many traffic managers, the lack of top management appreciation is the result of the traffic department's unsatisfactory position in the company organization. Although it has been impressively upgraded in most companies during the past few years (see DUN'S REVIEW, June 1958, page 70), it often still reports to an operating department—such as sales, purchasing, or production—rather than directly to the top.

Traffic usually works for a number of masters, though it reports to only one of these operating departments. Management has been reluctant to establish and maintain a full-fleged independent department, especially when it appears that traffic can be handled as an adjunct to purchasing or plant operations. And since many traffic managers have to work under other departments, their identities and the impact of their work have been obscured.

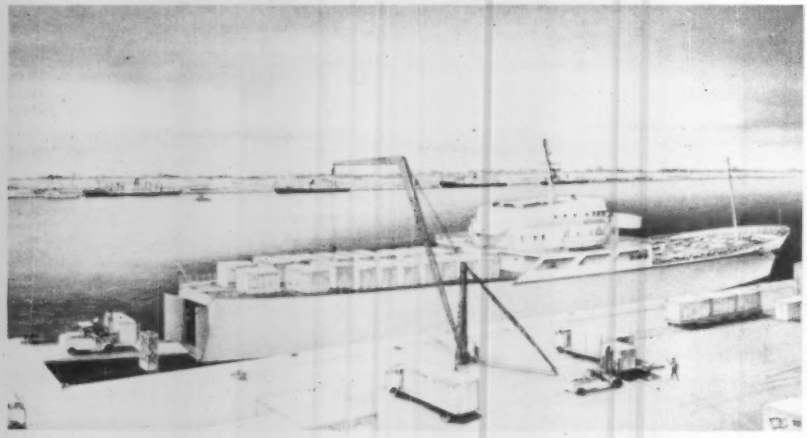
In many companies, the traffic department merely evolved out of the shipping department as the duties became more complex. There was little thought of the department's place in the company, or what its over-all objectives would be. Until very recently, traffic managers themselves thought almost entirely about purely traffic objectives, giving scant attention to the relationship of their duties to total physical distribution or to the work of other departments.

But, notes the traffic manager of a Southern chemical producer, "This is the era of the engineer-manager, who instinctively—as a result of his educational background—tends to belittle all fields and activities not compatible with the 'quick draw' of the slide rule. He is oblivious to the potential in fields other than engineering. The only way this can be overcome is for colleges and universities to change the name of their curricula from 'traffic management' to 'traffic engineering,' and to give the traffic major two years of engineering, so that he can talk the language and break the barrier."

According to Kenneth Vore, assistant vice-president of traffic for U. S. Steel, the title could well be changed to "transportation economist" or "transportation director," for transportation now controls the profits of many a company.

Better liaison a must

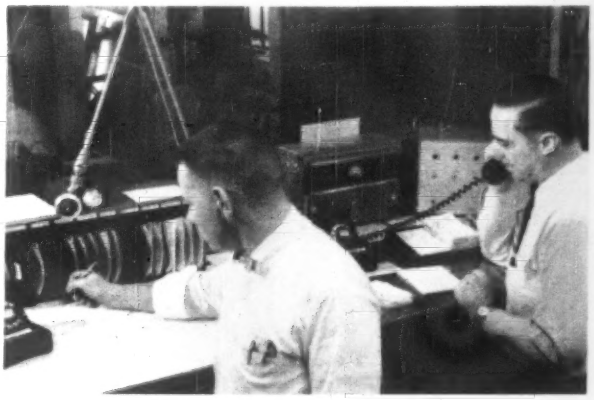
Traditionally, the primary activity of the traffic department has been determining rates and routings and seeking rate reductions. (See DUN'S REVIEW, June 1958, page 71, for a discussion of routine traffic activities.) But the tempo of competition has made both sales and purchasing



"CONTAINERSHIP." *Scheduled to begin operations in August between New York and Florida is this containership and another like it. They are the first ships specifically designed to handle containers. Grace Lines and Pan-Atlantic use converted vessels for the purpose. Containership loading will be done by crane and fork lift.*

CONVEYERS. *Vans now come equipped with powered pallet conveyers mounted in the body floor which carry the load forward into the nose of the truck.*

Tighter Control with Two-Way Radio



TO TRACE *shipments quickly and speed pick-up schedules, more and more truckers use the two-way radio. At Cleveland Freight Lines, the dispatcher can contact any truck in his fleet and maneuver it about to get the most work out of a day's schedule or take care of emergencies on the spot when they occur.*

EACH DRIVER *has a mobile receiver and transmitter in his cab. He can let the dispatcher know if new pick-ups turn up or if breakdowns slow a shipment. Far from resenting the close surveillance, the drivers—who are in a profit-sharing plan—welcome it. Tighter control means more work. More work means more pay.*

more dependent upon traffic than ever before. Sales has demanded improved service to keep customers happy, at the same time requesting reduced transportation costs in order to extend the potential marketing area. And it is now demanding more comparative data on the costs of transportation for special campaigns and new products. At the Lily-Tulip Cup Company, the manager of distribution and traffic is even part of a sales planning committee.

The tight inventory policies that many customers have, together with their insistence on fast delivery, have led many companies to seek a fresh approach to all of their distribution methods. In some instances this has led to sweeping changes, such as dropping warehouses and changing over to air freight (see DUN'S REVIEW, November 1959, page 60).

Whatever form a change may take, it calls for a searching analysis of all the activities—traffic, shipping, packaging, warehousing, materials handling, order processing—which get the products to the point of payoff: the customer's door.

Since these activities interact upon each other to raise or lower the total cost of distribution, there is a growing tendency for top management to bring them under unified control—sometimes under a broadened traffic department, but more frequently under a new distribution department, of which the traffic department may be only a part.

Among the strong advocates of unified control of distribution is Philip F. Cannon, Barrington Associates. He says: "No matter how well a traffic department is organized in itself, it operates in a relative vacuum unless it is part of an integrated distribution setup. Having separate distribution functions spread helter-skelter throughout the company is like trying to win a fight with your open hand. The palm isn't anywhere near so effective a striking weapon as the clenched fist.

"The communication and liaison problems that the traffic department often has are automatically eliminated when the company organization recognizes distribution as a separate, major function."

The 221 surveyed transportation executives report major revamping of the functions of the traffic department, which in almost every company now has broader responsibilities than it did just a few years ago.

Integrating distribution

Several of the companies questioned have already set up distribution departments to tie together all the activities that go on from the end of the production line to the customer's door. These include, among others, National Drug Company, Cutter Laboratories, H. J. Heinz, Spencer Chemical Company, Lever Brothers, Elder Manufacturing, Richardson Corp., Scott Paper Company (see page 139).

About one in five of the surveyed companies that have not actually set up formal distribution departments have put most of the distribution activities under the upgraded traffic department. Others are moving towards more intensive control of all physical distribution functions.

To insure the best possible coordination, a few of the manufacturers surveyed have made their top traffic men vice-presidents. These include U.S. Steel, Koppers Company, U.S. Gypsum, National Distillers and Chemical Corp., National Plastics Corp., Kaiser Aluminum, Union Bag-Camp Paper Corp., and E. F. Drew Company. In a number of other companies, the head traffic man has retained the title of "director of transportation" but does join in top level planning.

Most frequently the activities that have been added to the broadened traffic departments have been warehousing, export shipping, operation of shipping and receiving departments, and operation of truck and car fleets and company planes. Increasingly, too, traffic managers are being consulted on plant location, materials handling, and packaging decisions.

In several of the surveyed companies, the activities of order processing and customer service have been taken on by traffic departments. In a few, the traffic department has been rendering unusual aid to sales by providing advice to customers on the shipping of their own products (see page 125).

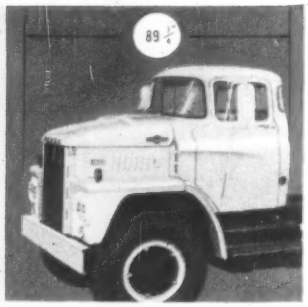
Several of the traffic executives questioned say that since their companies sell their products to the car-

How Dodge Cab-Forwards TOP THE "TILTS" in engine accessibility

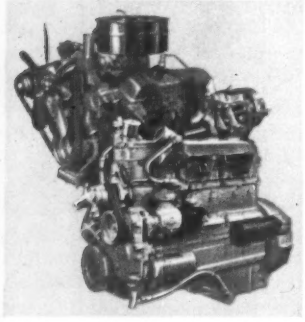
New Servi-Swing fenders do the trick! You just unlatch them, they swing out 110 degrees and there's your engine: a sitting duck for fast, easy servicing. No costly tilting mechanism to go on the fritz. No worries about overhead clearance. No locking problems. It's the new approach to engine accessibility. And only Dodge offers it! But that's just the beginning . . .

Compact Dodge Cab-Forwards tape just 89¾" from bumper to back of cab. Driver sits safely behind the engine . . . behind the front axle, too, for comfortable riding. And he enjoys easy handling, top visibility, easy entry-exit and five-way cab ventilation.

You've a wide choice of models from 15,000 lbs. G.V.W. to 76,800 lbs. G.C.W. Trucks and tractors. Tandems. Gas and diesel engines. A great new line of conventional models, too. Better buzz your Dodge dealer now. You'll want *all* the facts . . . and he's got 'em!

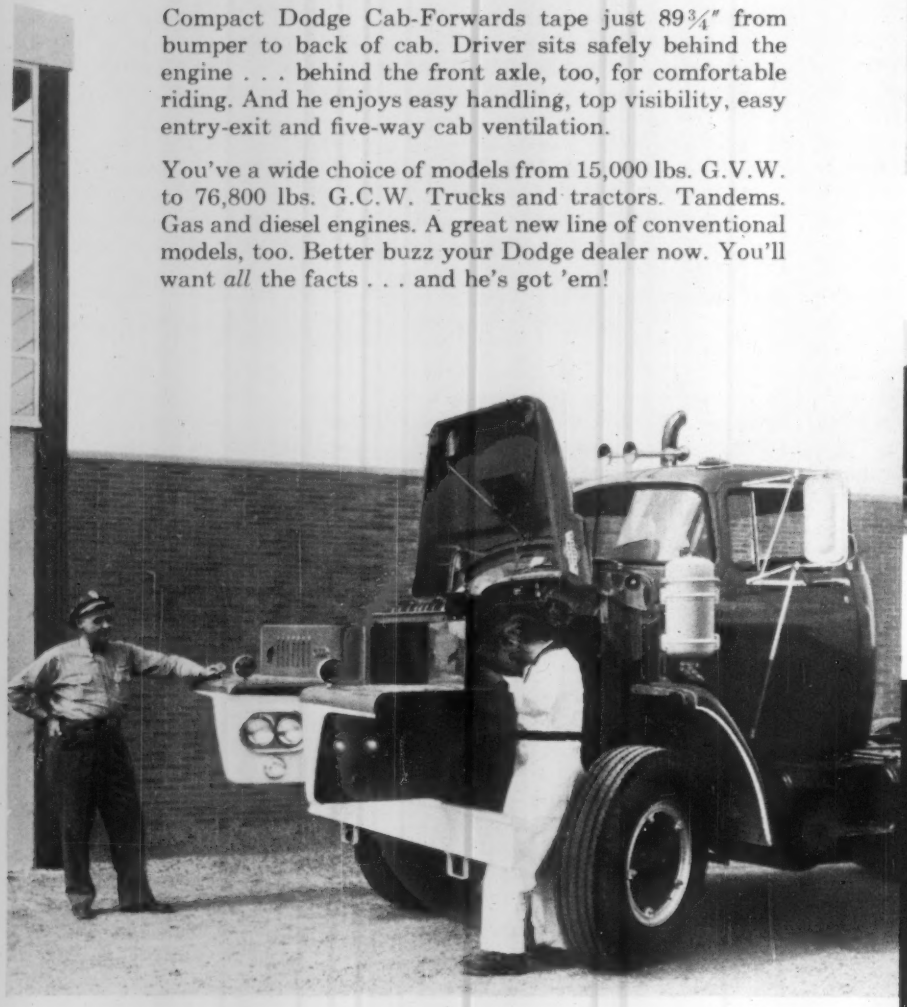


COMPACT 89¾" BBC makes your new Dodge Cab-Forward an easy handler, helps you meet legal length limits, boosts payload potential.



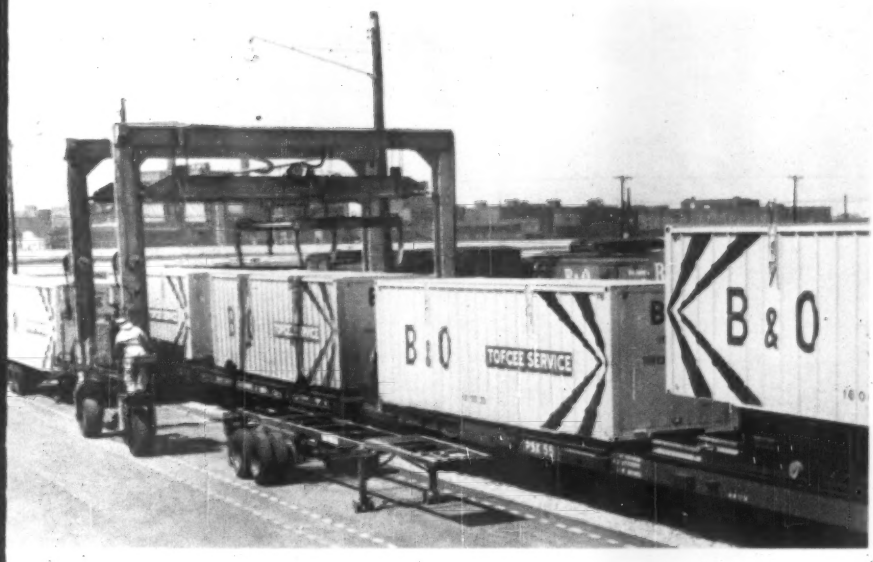
NEW ENGINE LINE-UP includes new gasoline V-8's from 178 to 228 hp. Thrifty Cummins diesels from 175 to 220 hp. now available for top fuel savings in high-tonnage models.

CONVENTIONAL MODELS offer new power in a wide choice of wheelbases to suit your needs. G.V.W.'s to 25,000 lbs. G.C.W.'s to 50,000 lbs.



DEPEND ON DODGE TO SAVE YOU MONEY IN TRUCKS

A PRODUCT OF CHRYSLER CORPORATION



New device for piggyback

Now being tested in the Kearney, N.J., yards of the Pennsylvania Railroad is this giant straddle carrier which can load or unload both trailers and containers. It is a distinct departure from the usual circus method. Under that system, each trailer is backed up a ramp and driven backwards down the full file of flatcars, which are tied together by bridgeplates.

riers, they have been asked to help promote these products directly. In one small company, the traffic manager has actually taken on the chore of selling to carriers. Says the director of transportation of a Midwest manufacturing company: "Because we manufacture items for the railroad industry, I often assist the sales department on a trade relations basis."

In some companies, traffic management is already beginning to move out of the field of narrow specialization. In the larger ones, the traffic manager is an administrator who marshals the intricate technical specialties of his staff to bear on over-all transportation problems.

No time for trivia

No longer can a traffic manager spend his time looking into the details of the many tariffs which his department staff must consider. To qualify for the broadened responsibilities which many companies now open to him, he leaves the minutiae to his rate clerks, keeping a wary eye for errors in strategic traffic matters.

Karl M. Ruppenthal, director of the transportation management program in the Graduate School of Business at Stanford University, reports: "The traffic manager in well-run companies can no longer be a rate and routing clerk. Today he is concerned with warehousing, inventories, private transportation, plant locations, and many other problems.

"The need for well-trained transportation people imposes an obligation on the universities. It means that many of them will have to revise their curricula, because 'transportation' and 'marketing' no longer exist in tight little compartments. Since it is impossible for many companies to re-staff their transportation departments with well-trained college graduates, sound management development programs will be extremely important in the years ahead."

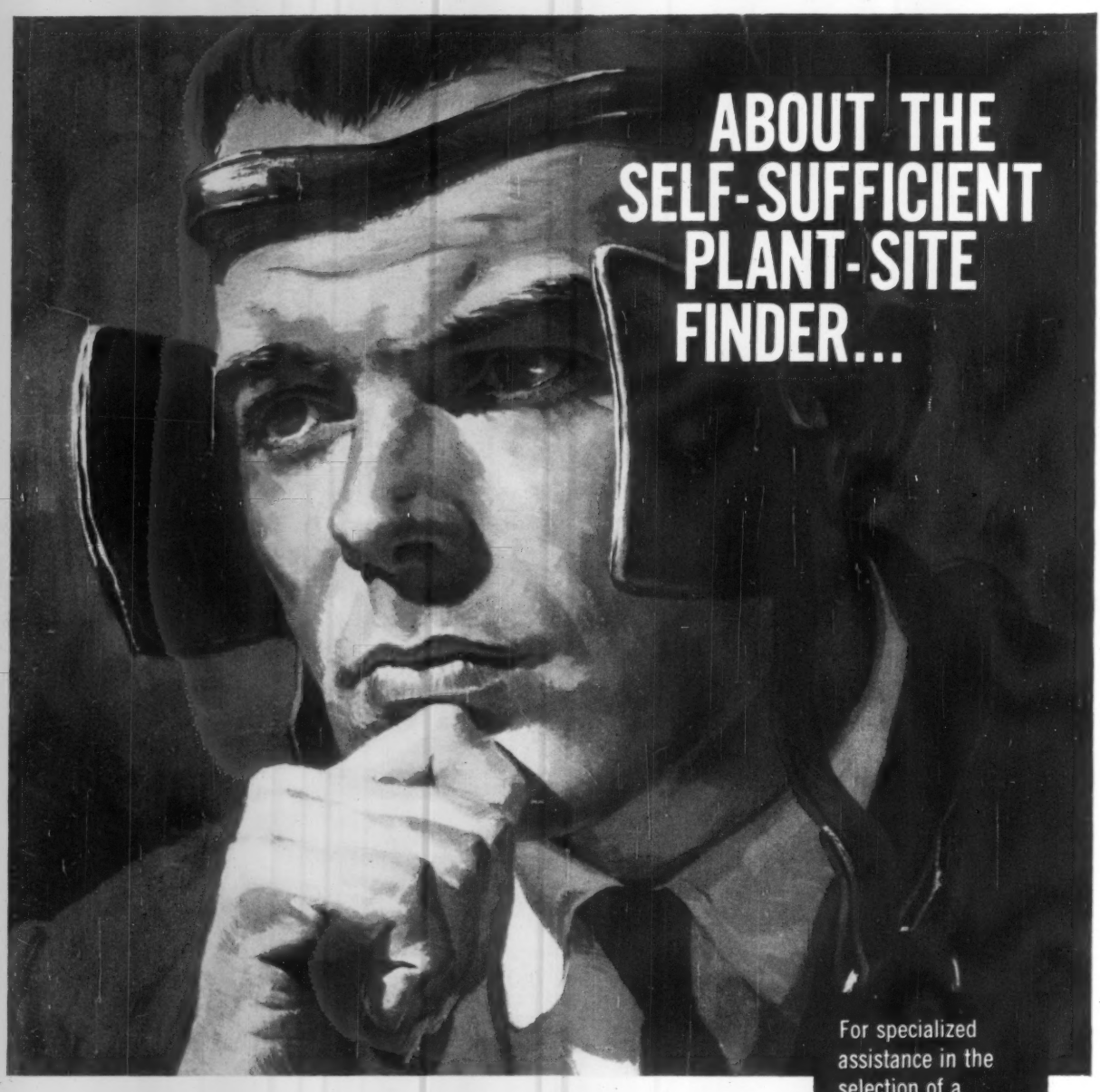
Jockeying for control of the newly recognized function of physical distribution has already begun in many companies. The traffic manager is perhaps the most logical choice when it is a question of moving someone up to assume over-all responsibility for all the factors involved in the flow of materials into—and products out of—the plant. But the switch to a broad department of physical distribution is not unrelated to another reorganization that is bringing executives in charge of marketing to the top echelon. In hiring new traffic department people, many large companies—U.S. Rubber for one—now look for men who have some marketing background.

The new distribution manager will have to invade several historic bastions—sales, warehousing, packaging, materials, materials handling—all of which are well entrenched and defended by people who are reluctant to surrender their portions of the function of total physical distribution that in most companies is now shared among them.

Says George H. Cunningham, general traffic manager of Sterling Drug, Inc.: "Traffic, warehousing, inventory control, order processing, materials handling, and shipping will be included in this new area of physical distribution. Today these sub-functions are divided between production and marketing. Because of the close inter-relationships of these sub-functions, greater efficiency would almost certainly result if a single responsibility were created.

"Assuming there is a competent traffic executive in the company already, he should be best qualified to take the leadership in this budding field, since through his present liaison with the various departments he ought to have more knowledge of each sub-function than any other man associated with physical distribution.

"For example, it's rather unlikely that you'd find many specialists in inventory control who would have sufficient knowledge of traffic to head a department of distribution. Traffic



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Providing the right information is the main business of our Industrial Development Department. This expert staff is qualified to furnish authoritative data in such diverse areas as engineering, geology, transport, hydraulics, power, marketing, labor, community acceptance, legal affairs. Correctly assessing the situation in any one of these subjects could be important to the success of your industrial location.

It doesn't do a bit of harm to establish a broad base of inquiry . . . shuck-off the blinders . . . contact Chicago and North Western Railway. There is no charge, inquiries held in confidence.

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CHICAGO AND **NORTH WESTERN** RAILWAY

A SOUTHERN PACIFIC *expert tells shippers how to improve rail shipping methods at a get-together in Los Angeles. To cut the $115 million lost through damaged shipments each year, railroads and the Association of American Railroads send out specialists in packing, loading and even materials handling for consultations.*

is not only the most technical and the broadest of the functions in physical distribution, but it is also the one demanding the greatest exercise of imagination.

"Moreover, a production or marketing executive, while perhaps an excellent leader, would have to depend too much upon the men around him if he were to head a distribution department. His decisions would not be based on his own knowledge but on those of someone else, and this situation would be likely to continue for a number of years. It is only after long experience that traffic can be even partially mastered.

"Don't misunderstand me. A good manager should try to surround himself with informed, capable people. But in addition to knowing how to say 'no,' he ought to know *why* he is saying it. Without some knowledge of what he is doing, he would soon become more a politician than a manager."

Is today's traffic manager competent to direct the new function of physical distribution? "Yes," say the surveyed traffic executives—but one expert, a partner in a major consulting firm, dissents. He reports: "As we go from company to company, we find a great many traffic managers who could in no way measure up to the standards set by the top traffic managers.

"To me, one of the biggest roadblocks to good transportation is the fact that so few traffic managers are of executive caliber. They talk about how they would like to be directors of physical distribution, how they would like to have more responsibility, yet often they are actually not much more than clerks filling a clerical position that has a good title.

"Logically the traffic manager ought to be given the job of director of physical distribution. But we find so many traffic managers in so many companies who are not competent to take on added responsibility."

The traffic manager of a major rubber company agrees. "Many traffic people are strictly traffic men," he asserts. "They can check a rate and routing and so on, but most of them have a very slight understanding of the new concept of physical distribution and marketing."

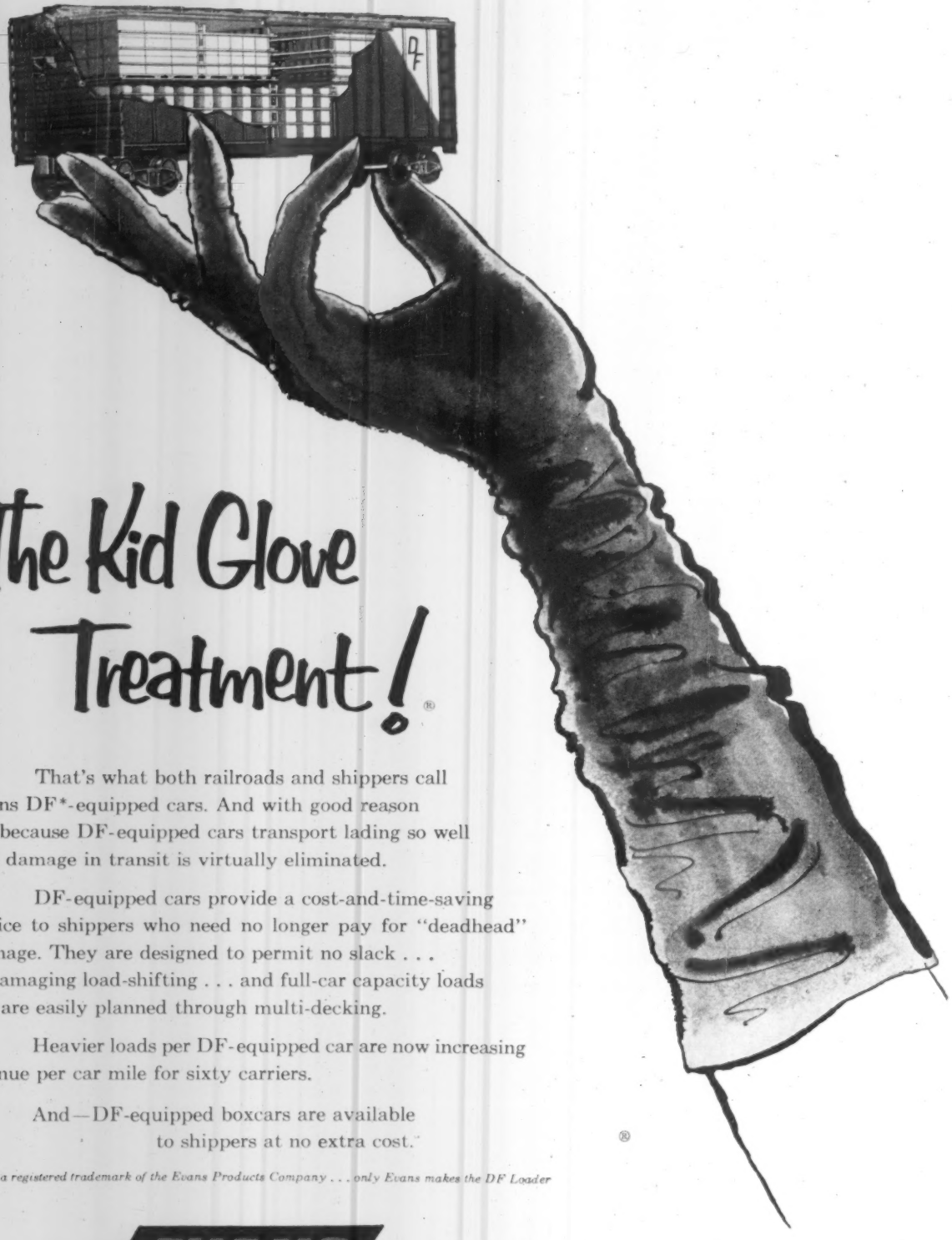
The top traffic man for a major food company points out one of the qualifications all traffic men need: "One of our biggest problems is that we do not know enough of what the other people in our organization are doing. The traffic fellow has, in a sense, been fighting for recognition without ever knowing what the comptroller's job is, or the marketing man's, or what the operational problems are. The more we can learn about management in general, whether through schooling or communication within the company, the more effectively we can do our job. This is our problem."

According to one high traffic executive, Ed Maney of IBM, traffic men in general haven't shown enough initiative in assuming the new burdens of total physical distribution. He says: "The distribution function is just waiting to be taken over—now. No one seems to have the initiative to come forward. For instance, most marketing groups don't want it. Usually manufacturing and production don't want it, although in most companies each of these groups carries out some of the functions. So it is sort of a stepchild, waiting for somebody to come and say to top management, 'Look, we're best qualified to do the job and we ought to do it.' "

How to get the job

What does traffic have to do to prove it can handle the new, broadened responsibilities? Says Frank Tighe of Union Carbide: "As soon as the traffic department indicates to top management that it is capable, well-staffed, and well enough acquainted with the whole picture to take over, then I believe the job will be given to it."

To be able to do a better job of improving distribution, today's traffic managers need better—and faster—



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That's what both railroads and shippers call Evans DF*-equipped cars. And with good reason . . . because DF-equipped cars transport lading so well that damage in transit is virtually eliminated.

DF-equipped cars provide a cost-and-time-saving service to shippers who need no longer pay for "deadhead" dunnage. They are designed to permit no slack . . . no damaging load-shifting . . . and full-car capacity loads are easily planned through multi-decking.

Heavier loads per DF-equipped car are now increasing revenue per car mile for sixty carriers.

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Evans Products Company • Plymouth, Michigan

TRANSPORTATION DILEMMA

information from their accounting departments.

Notes the director of distribution for a paper company: "Almost every company knows exactly what is being spent in manufacturing costs. But transportation costs somehow or other get buried in the figures for inbound raw material. And even on the outbound, where they should be easier to separate, we do not get nearly enough information.

"In many companies, even when traffic makes a specific request for the information, it takes a long time for the accounting people to become fully aware of the extent and scope of the work they've got to do for us if we are to get all the data we need."

Obviously, no matter what lies ahead, good liaison work is already an essential for the traffic department. The surveyed companies report there are a number of activities over which traffic only recently gained control—all of which increase its contact with other departments:

- The routing of inbound materials
- The scheduling of inbound materials to coordinate with production
- The individual activities of plant shipping departments in multi-plant companies.

Some traffic men report that they are now consulted on the description of new products—a sensible improvement over past procedure, since the description can determine the freight rate. Others say that only recently have some top managements realized that the traffic departments, through rate negotiations, have been keeping their companies in territories normally considered outside the trading area.

Most of the surveyed transportation leaders—182 out of 221—look for important changes in the traffic manager's place in the company organization with the next five years. In the past a buyer of transportation, he is now developing into a coordinator of interrelated company activities.

What lies ahead?

Here are the specific changes these top traffic men anticipate:

- The traffic department will rise in top management's estimation, resulting in greater recognition for traffic executives and more responsibility.

Says Elliott G. Youngberg, general traffic manager of the Inland Steel Company: "There will be increased recognition that transportation costs are a major controllable expense which requires and justifies the employment of traffic managers with general managerial ability."

In the future, most traffic records will be handled by computers and other data-processing equipment. More precise data about transportation costs will be available.

- In many companies, distribution departments will take over traffic, along with such related activities as materials handling, shipping, warehousing, order processing, packaging, and other operations.

continued on page 68

About This Survey

The new DUN'S REVIEW survey of company transportation practices drew detailed replies to a four-page questionaire. It was completed by 221 manufacturing companies in the following size groups:

Sales in 1959	Number of Companies
Under $5 million	49
$5 million to $10 million	19
$10,000,001 to $25 million	39
$25,000,001 to $50 million	19
$50,000,001 to $100 million	32
Over $100 million	63

Replies were received from every one of the major industry groups in the Department of Commerce Standard Industrial Classification except tobacco manufacturers. The largest number—32—came from chemical producers. Among the other respondents were 29 food producers, 26 manufacturers of non-electrical machinery, 16 manufacturers of electrical machinery, 16 producers of fabricated metal products, 15 manufacturers of paper products, 13 producers of stone, clay, and glass products, and 12 producers of primary metals.

Most of the replies—177—came from top traffic executives—directors of transportation, directors of traffic, general traffic managers, and traffic managers. Nine were signed by vice-presidents, several of whom were vice-presidents in charge of traffic. Among the others who replied were distribution directors and a few purchasing agents.

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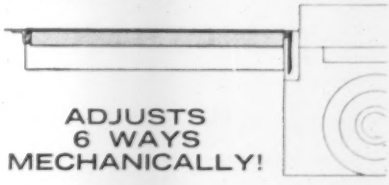
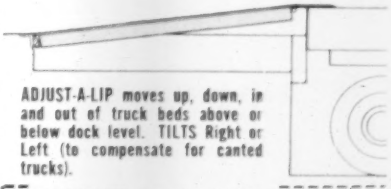
If these dockboards save us from a single injury in ten years they are well worth the investment.

Our crews go out of their way to use Kelley dockboards. The 6-way tilt feature is ideal for our setup. It helped us when packed snow created uneven driveway surfaces and tilted trucks. We now move equipment in and out of trucks safely — even with full double pallet loads."





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ON TIME

95% of all Central Shipments

A Notarized Performance Fact

OPERATING DEPARTMENT
CENTRAL MOTOR LINES - CHARLOTTE

Cumulative On-Time Service Report — Revised Ending April 30,1959

	East - 2nd day			West - 3rd day			South-Overnight			
	Recd	On-Time	%	Recd	On-Time	%	Recd	On-Time	%	%
Asheville	749	69[illegible]	[illegible]	996	721	72	642	5[illegible]	[illegible]	93
Augusta	[illegible]	559	75	726	[illegible]	96	2023	1913	95	96
Baltimore	457	432	94							94
Charleston	753	697	93	[illegible]	[illegible]	74	346	3[illegible]	[illegible]	93
Charlotte	[illegible]	4069	96	5[illegible]	5057	97	3827	3[illegible]	97	97
Chicago				15[illegible]	14[illegible]	92				93
Cleveland				[illegible]	1[illegible]	97				97
Columbia	2[illegible]	11[illegible]	[illegible]	1[illegible]	1[illegible]	98	748	723	97	98
Durham	1[illegible]	1364	96	1709	1[illegible]	95	6[illegible]	5[illegible]	94	96
Florence	1031	[illegible]	94	942	[illegible]	97	1[illegible]	1[illegible]	97	94
Greensboro	3[illegible]	3214	99	5[illegible]	5[illegible]	96	1[illegible]	1[illegible]	97	99
Greenville	1[illegible]	1[illegible]	97	1[illegible]	1[illegible]	99	1[illegible]	1[illegible]	98	97
Hickory	690	6[illegible]	95	754	6[illegible]	88	[illegible]	4[illegible]	99	91
New York (Clifton)	7[illegible]	6[illegible]	93							93
Phila	2[illegible]	2[illegible]	96							96
Spartanburg	5[illegible]	5[illegible]	97	[illegible]	[illegible]	98	4[illegible]	4[illegible]	97	97
W-Salem	9[illegible]	9[illegible]	97	9[illegible]	9[illegible]	94	9[illegible]	9[illegible]	94	95
	27204	26025	96	39014	37090	95	14261	13587	95	

SYSTEM — Delivered 80,479
On-Time . . . . . 76,702 . . . . . 95%

State of North Carolina } SS
County of Mecklenburg }

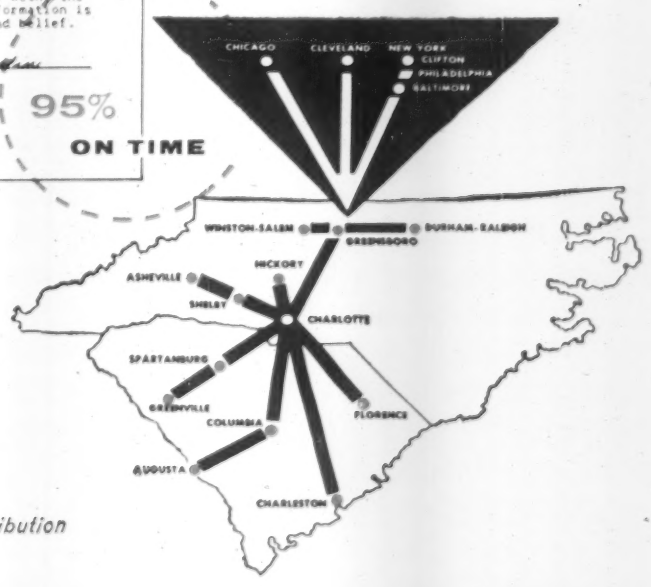
John W. Martin, Director of Operations, being first duly sworn, on oath states that he has personal knowledge of, and is familiar with, the information contained in the above statement and that such information is true and correct to the best of his knowledge, information, and belief.

John W. Martin

Subscribed and sworn to before me this 1st day of May, 1959.

Notary Public
My Commission Expires October 7 1959

The Man from Central will show you a notarized Cumulative Service Report detailing on-time records at each of our terminals. *Here are accurate records that permit you to plan and schedule shipments on a proved delivery basis.* Small shipment or volume shipment . . . you can have confidence when you route Central . . . superior performance is a matter of record.



IMPORTANT
COVERAGE OF THE
CAROLINAS
TO AND FROM
THE EAST AND WEST

There is no substitute for single-line carrier distribution of all-size shipments from origin to destination.

continued from page 65

• If the nature of the business doesn't call for an integrated distribution department, there will be much closer coordination of the still-independent traffic department with the sales and production departments.

• Traffic men will become more familiar with new management techniques, such as operations research, which is put to work by many large companies in such physical distribution problems as warehouse location, stock levels and mixes needed at distribution points, scheduling of shipments, and vehicle loading.

• Upgraded traffic managers will be consulted increasingly on sales policy, new product pricing, plant locations.

What can top management do to get control of transportation, the third largest business expense?

1. Have cost studies run to determine the amount the company spends on transportation. Generally, the information on the cost of moving materials in is buried in plant production costs, and the costs of physical distribution are hidden in overhead expenses.

2. If, as is likely, cost studies indicate that the costs of movement are a major expense area, this should be recognized throughout the top management echelon.

3. Set up a full-time traffic department if the company is large enough to support one and lacks it at present. Or hire transportation consultants, who can provide valuable service.

4. And if you already have a traffic department, it should in most instances report not to one particular operating department—such as sales, purchasing, or plant manufacturing management—but should be a staff department that serves all of them.

—T.K.

TRANSPORTATION DILEMMA

Double Trouble in Transport:

The Impact of Regulation

Outdated regulatory restrictions hobble the carriers, add to shippers' headaches. Here are current proposals for cutting the red tape and regulatory snags that up the cost of moving goods to market.

TO many, the landscape through which management moves its raw materials and finished products is a maze of archaic, cumbersome, contradictory rules and regulation, festooned with red tape and endless paperwork. To others, it's a well-ordered but delicate network that needs constant regulatory attention to keep it free of abuses and the threat of monopoly.

If you're one of the men in manufacturing who are responsible for the day-to-day movement of goods, you've learned to live with the rigmarole of regulation—but you wish something could be done about it. A new DUN'S REVIEW survey of top transportation management in manufacturing (for details, see page 65) reveals that many companies could realize important savings if regulatory restrictions were removed or at least relaxed.

Regulation in transportation can be seen from many sides.

Top management in manufacturing sees little justification for much of it and would welcome more free enterprise in moving its products. P. C. Spencer, chairman of the board of Sinclair Oil Corp., recently pointed out that most transportation laws were products of the depression and are now often roadblocks to progress in a fast-changing economy.

The railroads favor considerable relaxation of regulations — except when competition from another railroad pinches.

The Commerce Department favors gradual but pervasive changes in regulations, so that competition can play a stronger role.

But the trucker, the waterway carrier, and the air carrier consider regulation a bulwark against the massive power of the railroads—which, they fear, are ready to swallow them. One survey of motor carriers revealed that 80 per cent thought that their business was preserved by regulation.

Whether they are right or wrong, one definite result of regulation has been that today the transportation industry is less free to manage its own affairs than any other business.

There is a simple measure of the scope of the regulatory job in today's transportation: The ICC annually

handles about 7,000 formal cases in which hearings—or at least the opportunity for hearings—are involved. Almost all are concerned with the way management moves goods.

Regulatory restrictions take many forms, affecting both carriers and shippers. Those that decide the shape of carrier operations also determine to a large extent just how far manufacturers can stretch their transportation dollars.

There are regulations on the specific territory that a carrier can serve, the route it can follow, the commodities it can move, the prices it can charge, and many other matters. The very act of going into business as a carrier to move goods for industry involves a regulatory ritual: The prospective carrier must demonstrate in lengthy proceedings—at which he can be challenged by competing carriers—that there is a real need for the service he wants to offer.

High cost of regulations

Nearly 80 per cent of the companies surveyed by DUN'S REVIEW believe that all these regulatory requirements put an unnecessary burden on American industry, pushing its annual freight bill higher than it ought to be.

About 85 per cent of the machinery manufacturers and 95 per cent of the producers of fabricated metal products pinpointed regulations as one cause of the high costs of industrial transportation.

The surveyed company transportation executives say that industry's total freight bill could be cut anywhere from 3 to 33 per cent by major changes in ICC and other regulations. The average reduction considered possible was about 13 per cent, a cut that would open impressive opportunities for adding to company profits.

If the regulations were changed, the chemical companies could anticipate the largest drop in their freight bill: the average potential saving this group cited was 20 per cent. Producers of non-electrical machinery feel that they could save about 15 per cent. Food companies look for only about a 7 per cent reduction—since many of them operate their own truck fleets, they are already free of many regulatory headaches.

In the opinion of their own traffic experts, modified regulatory restrictions would bring larger freight bill reductions—of about 15 per cent—to the medium-size companies than to either the small or large ones. The average reduction expected by companies with sales from $1 million to $4.9 million was 10 per cent; the same estimate was given by those with sales over $100 million.

To DUN'S REVIEW editors, the top transportation executives from a wide cross-section of American industry voiced their specific complaints about present regulations. Although Interstate Commerce Act regulations were most frequently mentioned, state restrictions were also included. The main targets of complaint:

- *Long-drawn-out rate and classification proceedings*, which are expensive for the companies or carriers involved. The ICC, they say, has a faulty sense of time. Decisions are often delayed for months after the long hearings. And the Commission has been slow in putting the Transportation Act of 1958 into effect. While waiting for it to make up its bureaucratic mind, companies often lose business they might have won if decisions had been rendered sooner.
- *The endless—and again costly—paperwork involved.* Tariffs and classifications must be checked, double-checked, and re-checked—by the companies. To a degree that is no longer necessary, all areas of transportation are regulated—rates, safety, accounting, finances, and so on. Required reports cost money that could be used for improvements. State governments, too, set up varying and artificial requirements.
- *The prevention of competition*, which keeps rates high and discourages new techniques. Carriers often can't base rates solely on their cost of service. Low-cost efficiency brings no rewards. Private trucks aren't allowed to compete with common carriers for traffic; railroad piggy-back rates must be held to the lowest truck rate between the points served; a transportation company that could cut rates—and thereby increase traffic and make money—is forbidden to do so.
- *ICC insistence on senseless and outmoded operations.* In some cases, circuitous truck routes are enforced. Railroads are required to operate unprofitable branch lines, unless they can prove abandonment is not against the public interest. Manufacturers' trucks, forbidden to carry anything but the company's materials and a few exempt commodities, make too many empty backhauls. Many industrial traffic managers say the ICC ac-

Fred Muller, Arthur D. Little, Inc.:
"Regulatory problems reduce the full advantage of advances like piggyback and containerization."

Ed Maney, IBM:
"Whether carriers and shippers like it or not, we are going to see less regulation."

James Haley, Koppers Co.:
"I'm not afraid of any monopoly in integrated transportation. I can get my own trucks, barges, and planes."

David M. Daley, Bristol Myers:
"Removal of many present-day regulatory restrictions would inevitably result in fairer competition."

tually resists the development of new rate methods, processes, and services, although there have been some innovations—piggyback rates, for instance.

Not all of the traffic managers who feel that present-day regulations added to the cost of moving goods favor dropping them, or even making major revisions. A few regard the cost of regulation as a necessary business expense. For instance, R. H. Heilman, director of transportation for A. O. Smith Corp., Milwaukee steel fabricator, says: "Regulatory requirements always add to the final cost of a product, but I believe that in the transportation industry some are a definite necessity."

But about 75 per cent of the 221 surveyed manufacturers advocate specific major changes in the Interstate Commerce Act to help them reduce transportation costs.

Revising the rate-making process is the most popular of the changes suggested. Most of the responding manufacturers feel that rates should be judged on the basis of whether or not they are compensatory, without reference to their effect on competing carriers.

Next in number are suggestions that railroads be allowed to operate other types of carriers.

Among other changes the surveyed manufacturers propose are:

- Equal treatment for all types of carriers, and more consistent regulations
- One regulatory agency for all types of carriers, including airlines
- Reparations to shippers for truckers' unlawful charges
- A simplified rate structure, designed so that "a rate clerk can determine a rate without having a lawyer at his elbow"
- A reduction in red tape, and less wasted time at rate hearings. One traffic manager demands: "Eliminate the long waiting procedures for notice and publication of rates and rules, so that shippers can meet their fast-changing distribution problems." Says another respondent, the manager of transportation for a major auto producer: "Decisions are now made so far after they are needed that they are, often enough, completely useless."

Most of the 221 traffic executives in manufacturing feel that technological advances in transportation are also being hindered by present-day regulatory restrictions. Many of the 80 who disagreed say there definitely is a technological hold-back, but place the blame for it on featherbedding, lack of carrier cooperation, or the carriers' financial plight.

Some who feel that regulatory re-

The Common Owner-

"Common ownership" vs. "coordination"—that is the title of one debate raging in transportation circles today. Put in such simple terms, however, it does not reveal the scope, or even the real nature, of the argument—or of the emotional overtones it carries.

At issue, in reality, is whether the railroads shall be given the right to buy competing transportation facilities—or whether, as their competitors suggest, they should stay strictly in the railroad business but drop their opposition to coordinating shipments with all other types of carriers. (All surface carriers are prohibited from

The Case for Common Ownership

Here's a summation of the railroad industry's plea for the right to operate trucks, planes, barges, and ships—and offer shippers one-package transportation. Their stand is given qualified support by the National Industrial Traffic League (the largest shipper organization), by the U.S. Chamber of Commerce, and by Under Secretary of Commerce for Transportation John J. Allen, Jr.—all of whom believe, however, that each case of proposed rail diversification should be approved only if it is clearly in the public interest.

- Diversification would enable shippers to receive complete transportation service at reasonable cost from a single source. The average shipper must now determine for himself the types of transportation that best meet his needs, and select the particular companies that can move his particular commodity over particular routes at a specified time—and at rates which the product can bear. If he could deal with a single transportation company, it could furnish him the several types of transportation he often needs, moving shipments between two or more different kinds of carriers with but one bill of lading. And he would have to deal with only one tracing service in tracking down lost orders.
- When the railroads are allowed to use motor transport under present regulations, they can do so only in an inefficient and wasteful manner that leaves both shippers and railroads dissatisfied. Unless they have grandfather rights (resulting from the existence of a rail-owned motor carrier prior to 1935), railroads can use trucks only as auxiliaries to rail operations.
- Railroad monopoly is just a bugaboo from the past. As the other carriers have grown to maturity—helped along by the restrictions on railroads—the balance has swung heavily in favor of the railroads' competitors. In Canada, where the two railroads have diversification rights, there are many thriving independently owned competitive enterprises. The United States is now the only country in the world that still refuses to permit integrated transportation.
- Railroads have to pay heavy taxes to help build and improve highways, airports, and waterways. They should have equal opportunity to use them.
- Voluntary coordination of two or more different types of carriers through joint rates may have its place—but it certainly doesn't provide the solution offered by common ownership. Under coordinated arrangements, the trucker always has an alternative method of movement. There are constant difficulties over the division of rates, over the unrouted traffic, and over who will get the long-haul. In many piggyback operations, it is the trucking company that executes the bill of lading with the shipper, has all the contacts with him, and delivers the freight. As only an intermediate carrier, without contact either with shipper or consignee, what would happen to the railroad if the trucking company decided to drop piggybacking and go back to the highway? It is only reasonable that the railroads, which have much larger investments and provide the main facility, should have equal access to customers.

strictions are the roadblock to technological advances comment:

"Getting new proposals for operational changes accepted takes too long."—Traffic manager, Midwest paper products manufacturer.

"If railroads also had authority to operate over the road, containerization would develop much faster."—Traffic manager, New Jersey chemical company.

"Carriers are reluctant to experiment for fear of not being granted the authority to expand their new services."—Traffic manager, Midwest producer of office furniture.

"Antiquated and outdated AAR restrictions, particularly on tank car construction and movements, are a real problem."—General traffic manager, major synthetic fibers producer.

"Regulation has led to an oversupply of carriers, many of which are financially weak and unable to develop new equipment and methods."—General traffic manager, major electrical products manufacturer.

How do shippers react to regulatory restrictions? With disgust, a former Government regulator says: "Regardless of how the carriers feel about it, shippers are getting sick and tired of trying to find out which carrier can transport what to which point.

"Recently a shipper described his troubles: 'There is a virtual circus at my plant every day. Some mornings as many as 20 trucks line up in the street and in the yard, trying to make deliveries. One carries one thing, another something else. No wonder the rates are high and the service is poor! The motors are running and the drivers are waiting—while we are waiting for deliveries. Why in heaven's name can't one or two carriers be authorized to transport all the commodities I need?' That shipper," the former regulator adds, "now operates his own trucks."

Reward for inefficiency

The general traffic manager of a large Eastern drug company vigorously pinpoints the most irksome results of today's regulations:

"Rates are usually based, not on efficient operations but on the operations of marginal carriers. Transportation capacity often far exceeds what is really needed.

"For example, just look at the number of carriers operating from Boston to Richmond. With few exceptions, they complain about insufficient revenues and high operating ratios. But if one carrier tries to buy another, competing carriers yell 'foul,' and find a sympathetic ear in Washington.

"If the tonnage handled by marginal carriers were absorbed by well-organized, efficiently operated companies, the costs per unit handled would be almost sure to drop."

What regulatory requirements mean to the manufacturer is pointed

ship Debate

acquiring an operating interest in any interstate air carrier. But all surface carriers *except* railroads can acquire an interest in other forms of surface transportation, and several of them have already done so.)

Here are the factual arguments each side presents. Less visible, but no less weighty, are the traditional fears of the rails' enormous financial resources, their tendency to monopoly—and the railroads' sense of grievance that competing carriers can offer customers and stockholders an advantage they are forbidden to enjoy.

The Case against Common Ownership

All the competitors of the railroads—truckers (both common and contract carriers), barge operators, air carriers, marine interests—are firm in their opposition to letting the railroads get into other modes of transportation. Their arguments:

- In the long run, they say, the shipper would suffer. Time after time the railroads have used their ownership of other transportation media to drive out competition and raise rates. There is nothing to indicate that this would not happen again. In fact, recent experience—such as the attack on the rates of coastwise water carriers and the concerted battle against for-hire truckers in Pennsylvania—clearly indicates that common ownership would substantially lessen competition. Many communities now have the choice of rail, truck, or water transportation. If they were served by monolithic "transportation companies," service would suffer—and rates would rise.
- Neither air, trucking, nor waterways carriers could possibly be where they are now if their development had been in the hands of railroad management, which would have been primarily concerned to protect its tremendous physical plant.
- Progress in railroading as well dates from the appearance of real competition from independent operators. Had the railroads had control of these competing modes, this progress wouldn't have taken place.
- The railroads—with their overwhelming financial resources—will certainly gain control of these other carriers if they are allowed to buy out the many independent operators.
- Operating truck lines is no solution for the troubles of the railroad industry. If it operated all Class I and Class II motor carriers, maintaining present standards of efficiency, the profits would make up only about one-half of the deficit on passenger traffic. Last year the ten largest motor carriers had gross operating revenues that amounted to less than one-tenth of the gross revenues of the nation's ten largest railroads.
- The creation of giant transportation companies would add to labor difficulties. At the present time, a strike may close down a railroad, a truck or bus line, or an air carrier. But if a strike hit one of the proposed "transportation companies," the shipper would be left with no way to move his goods to market.
- Regulatory problems would be multiplied. The CAB governs the air carriers and railroads are subject to ICC regulation. Even within the ICC, there would be greater complications if railroads had unrestricted trucking rights. The result would be delays and poor service.
- Although mergers within the railroad industry often result in substantial economy of equipment, trackage, and manpower, consolidation of a truck line with a railroad offers no such opportunity. The two industries differ not only in economics but also in equipment, terminals, labor skills, and many other features.
- Shippers are best served when each type of carrier seeks ways to improve service, reduce cost, improve equipment and facilities—and expand that particular carrier's role.

TRANSPORTATION DILEMMA

Do the Carriers Still Need Regulating?

The Kaiser Steel Corp.'s vice-president in charge of traffic, A. P. Heiner, says "No."

"Why do most people in transportation accept the necessity for regulation? There are many reasons given. One is that transportation is by nature a public utility. It affects nearly every industry and nearly every individual. Therefore, a Government agency must be vested with the power to grant operating rights and to make sure that rates are reasonable and that services are commensurate with the obligations to the public implicit in the franchise.

"There is no gainsaying the logic of this view. Transportation is a public utility. It does have a public interest.

"But there are many other industries not now regulated in which the public has equal interest. Shouldn't they be regulated just as much as transportation? Or, conversely, if they are healthy, vigorous, and progressive without Government regulation, shouldn't transportation be given the same kind of managerial freedom?

"It is frequently said that without regulation the law of the jungle would take hold. Is free competition the law of the jungle?

"A third reason frequently cited in support of regulation is that shippers, especially little shippers, need the protection of the ICC. This viewpoint is founded on the subconscious assumption that transportation leaders, while basically honest, cannot really be expected to be fair.

"Under the freedom that most American business men enjoy, industries have learned pretty well to police themselves. The forces of competition are such that abuses cannot long be perpetrated.

"I believe that if shippers and carriers spent as much time negotiating directly as they do in Government proceedings, the results would be more productive. A new sense of personal responsibility would be generated.

"Another reason mentioned is that transportation is monopolistic. There are, of course, some monopolistic features, but perhaps there are fewer in transportation today than there are, say, in the automobile business or the steel business.

"Such monopolistic characteristics do not mean there is no competition, which, as a matter of fact, is severe and intense. Ironically, the ICC was established to hold down rates because of the monopolistic railroads. Now it tries to curb the effects of so-called destructive competition. There is simply not enough difference between transportation and our other industries to justify regulation of one and not of the other.

"There is really only one reason why regulation of transportation exists today: That is because regulation is already in effect and we take it for granted. We think the end of the world would come without regulation. We think it would mean the destruction of trucking. We think it would mean cutthroat competition among the railroads.

"Many carrier officials not only are resigned to the regulated way of life but they actually depend on it. They do not avail themselves today of the freedoms they already have. Regulation is a crutch. Constantly they justify their lack of progress on the grounds that they don't have the freedom to do this or that. Sometimes it seems that the prisoners have fallen in love with their own chains. And they are especially in love with the chains of their fellow prisoners.

"Transportation has been regulated for 72 years. We transportation people—shippers and carriers alike—just wouldn't know what to do or how to act for a few years if it were eliminated. But if we could survive those first few years, adjusting our mental processes to this new responsibility, I believe that the absence of regulation would give a great stimulus to new activity.

"Should we deny to the transportation companies the kind of managerial freedom that has been so essential to the health and progress of other American industries? Should we prevent the carrier managements from having the kind of freedom they need to solve the problems of today—and, more importantly, the problems of tomorrow? Just as the establishment of regulation 72 years ago involved a new approach, shouldn't we be free today to pioneer—by learning to live without regulation?

"I do not underestimate the extent of this problem. We are dealing with an attitude, a transportation way of life, and that takes time to change. But such change can come only when people discuss openly and candidly the advantages which might come from increased managerial freedom."

From a speech delivered at the Transportation Management Program, Graduate School of Business, Stanford University, Calif. To be published in *Revolution in Transportation* (Stanford University Press).

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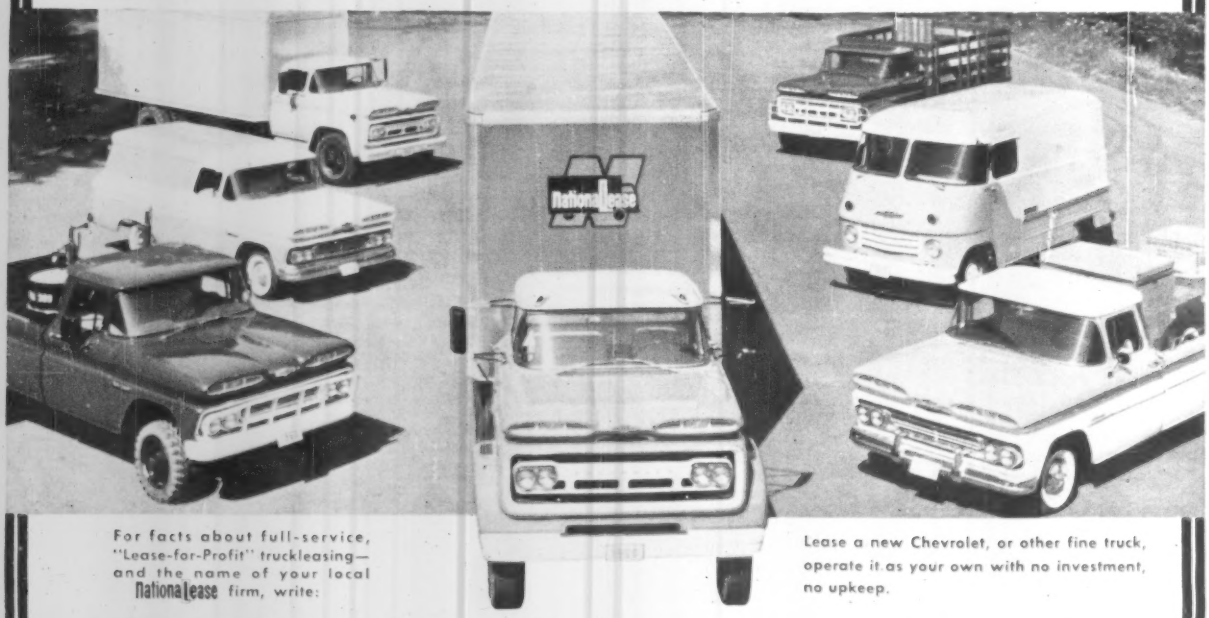

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up by the frequent appearance of industrial traffic managers before the ICC. To safeguard their companies' interests, they must take the time to testify in proceedings between carriers. Time and again they come to back one carrier or another, testifying that their ability to compete in various markets depends directly on the continuation of low-cost movement between various points.

The rapid growth of industry's own truck fleets reflects management's dissatisfaction with regulated common carriage. The complicated rate structure, the attendant paperwork, rising rates, the inability of some manufacturers with special commodities to find common carriers willing to move them—these are some of the reasons for the immense increase in private industry's truck fleets, both owned and leased, which already account for more than half the highway ton-mileage between cities.

Private truck fleets are not, of course, a refuge from Government regulation. Not only must they conform to state highway requirements, they must also meet ICC safety standards, both as to vehicles and drivers, when they move interstate.

Says the traffic manager of a small machinery producer in the Northwest: "The drivers of our private trucks must take care of so many regulations that our costs are higher than necessary. Some states require a different license from what we have, and these can cost from $12 to $987. Wisconsin has a 45-mile-per-hour limit on trucks. Iowa has 75 miles an hour on their new interstate system, while our trucks are built to travel about 55 miles an hour."

Says A. G. Anderson, general traffic manager of Mobil Oil Co.: "Transportation is a subject we have researched more and done less about than any other in our economy." Since the end of the war there have been nearly a dozen major studies of transportation conducted either by Congress or the U.S. Department of Commerce. One has just been completed by Commerce, another is scheduled to come from the Senate.

The recently released U.S. Department of Commerce study pinpoints 78 specific steps to be taken. Fourteen of these require new legislation, and in the light of renewed public interest in transportation problems, there is a greater likelihood such legislation will be passed than there was following previous Government reports.

Much of the suggested program is directed at increasing competition among carriers. Here are some of the recommendations to revitalize a transportation system that is described as being "out of balance":

- Slowly eliminate the restrictions on carriers' operating permits relating to commodities they can carry, routes they can use, and methods of operation
- Invoke user charges—on the waterways, for example—similar to those on toll roads
- Define "unfair and destructive competitive practices" more clearly
- Base rates on cost studies
- Gradually abolish rate suspension.

Both carriers and traffic men in manufacturing are excited—and irked—by two new developments, unrelated to the Commerce Department study, that have appeared in the field of transportation. These are the new ground rules for rate-making (pricing) and the railroad industry's proposals to provide integrated transportation.

continued on page 78

Diversified Transportation—and What It Would Mean

A. G. Anderson, general traffic manager of Mobil Oil, believes industry would benefit from changes the rails propose.

Transportation solely by rail, highway, or water, he thinks, is rapidly becoming an artificial limitation on the most efficient means of distributing goods. There is no physical reason why rail, water, highway, and even air transportation cannot be combined in a manner best suited to the job to be done.

What preserves the isolation of the different transportation agencies?

Anderson believes that it is the traditional fear that if a single enterprise operates more than one transportation medium, competition will be restrained. Under present law, railroads and freight forwarders—the very modes which can most readily furnish combined service by rail, highway, water, and air—are prohibited from acquiring control of other transportation media.

There are some who think motor carriers would have no future as independent enterprises if the barriers to formation of integrated transportation companies were let down. To Anderson, this is far from the truth. A great part of the present motor carrier freight, he believes, would continue to move by highway.

Only on long hauls does railroad transportation of trailers or containers have the advantage over trucks, and independent trucks could give all-highway service just as easily as those controlled by the railroads or freight forwarders.

"As a matter of fact," Anderson says, "I can think of several large motor carriers that could acquire a railroad—which would be in the public interest and would result, I am sure, in very efficient integrated operations. The only tonnage independent motor carriers would lose to integrated transportation companies then would be the traffic they could not handle as economically.

"There is a feeling among some who recognize the need for coordination of transportation media that this can be secured by voluntary cooperation. To me, this is wishful thinking. No carrier will voluntarily give to another mode the freight that it can haul itself.

"Only integrated transportation companies can furnish complete service to shippers. If such integration were to be given legislative sanction, the shipper would be able to purchase from one carrier that combination of transportation facilities best suited to his needs.

"The purpose of regulation must once again become the protection of the shipper rather than of the carrier."

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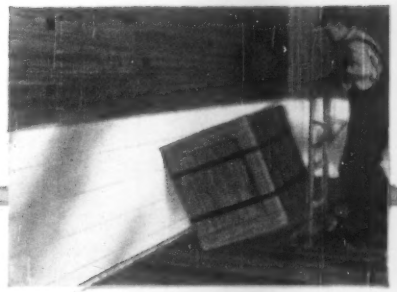

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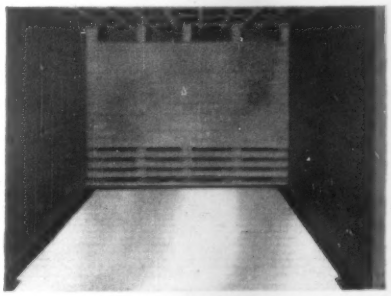

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TRANSPORTATION DILEMMA

Should one or both of these developments make a lasting mark, the impact on industry's sales policies, distribution methods, and plant location plans would be sweeping.

But a more immediate problem facing both shippers and carriers is the need for better cooperation among the various types of carriers. Says James F. Pinkney, vice-president of the Ryder System, Inc., truckers: "We transportation people tend to compartmentalize our thinking and show a lack of understanding about the problems and methods of other modes. We think of rail transportation, air transportation, freight forwarding. On the other hand, the average shipper tends to think in terms of a single function—the moving of goods.

"Ideally, all interests would lay aside their purely selfish, competitive motives and concentrate on putting together the best transportation system possible. But we must be realistic and recognize there are many valid reasons why the various carriers are reluctant to plunge into the unknown."

Incidentally, Ryder is now working toward joint rates with a few Southern railroads.

About 80 per cent of the 221 manufacturers DUN'S REVIEW surveyed believe they would reap major benefits if they could coordinate the services of the different types of carriers. They cite lower rates, better scheduling, simplified tracing, routing, and rate-making, and a reduction in paperwork as specific benefits.

More efficiency for less money

Many shippers want a through bill of lading, and they want to know the total cost of door-to-door movements. Rarely can they get either a through bill or an accurate idea of the total cost if a shipment moves by more than one type of carrier unless they use a freight forwarder who, of course, must be paid for his services.

If it were available, the joint rates for coordinated movement of goods would often be considerably lower than moving them between the same two points on only one type of carrier. If the different types of carriers were to provide coordinated service to shippers it would mean: joint rates and one bill of lading; agreement over through routes; the scheduling of traffic so as to tie in the times vehicles arrive and depart.

According to the trucking industry, shippers could have the benefits of coordinated transportation right now if the railroads would cooperate with independent truckers. For many years the railroads among themselves and the truckers among themselves have provided coordinated service—within their own industries. Recently several railroads arranged with truckers to move loaded trailers under joint rates (Plan V piggyback), and both groups say they have benefited from these arrangements. However, the overwhelming majority of the railroads still resist the idea.

Some observers look upon joint rates as a means for carriers to free themselves of some of the rigidities of operating restrictions. For example, where a railroad and a trucker agree to provide piggyback service under Plan V, each is able to service territory that is normally outside its area of operations. (This new arrangement is often characterized as an "invasion of territory," reflecting the proprietary attitude of many carriers.)

The surveyed transportation executives in manufacturing lined up 113 to 88 in favor of granting the railroads the right to operate other modes of carriage on a much broader scale than is now permitted. But most of them nevertheless want any change in regulations to include safeguards against monopoly.

Many of the industrial traffic managers who oppose common ownership fear that it would lead to a weakening of competition. For example, the director of traffic for a N.J. producer of paper products says: "In some areas, rail service leaves much to be desired. Without truck competition it would be worse than it is."

Should the right of diversification —another name often employed for common ownership—be granted the railroad industry, we might see an entirely different network of carriers. Experts predict that large regional transportation companies—in competition with one another—would provide service by whatever means seemed more practical.

The railroads say that the use of trucks would help them to:

- Eliminate branch lines that could be better served by trucks.

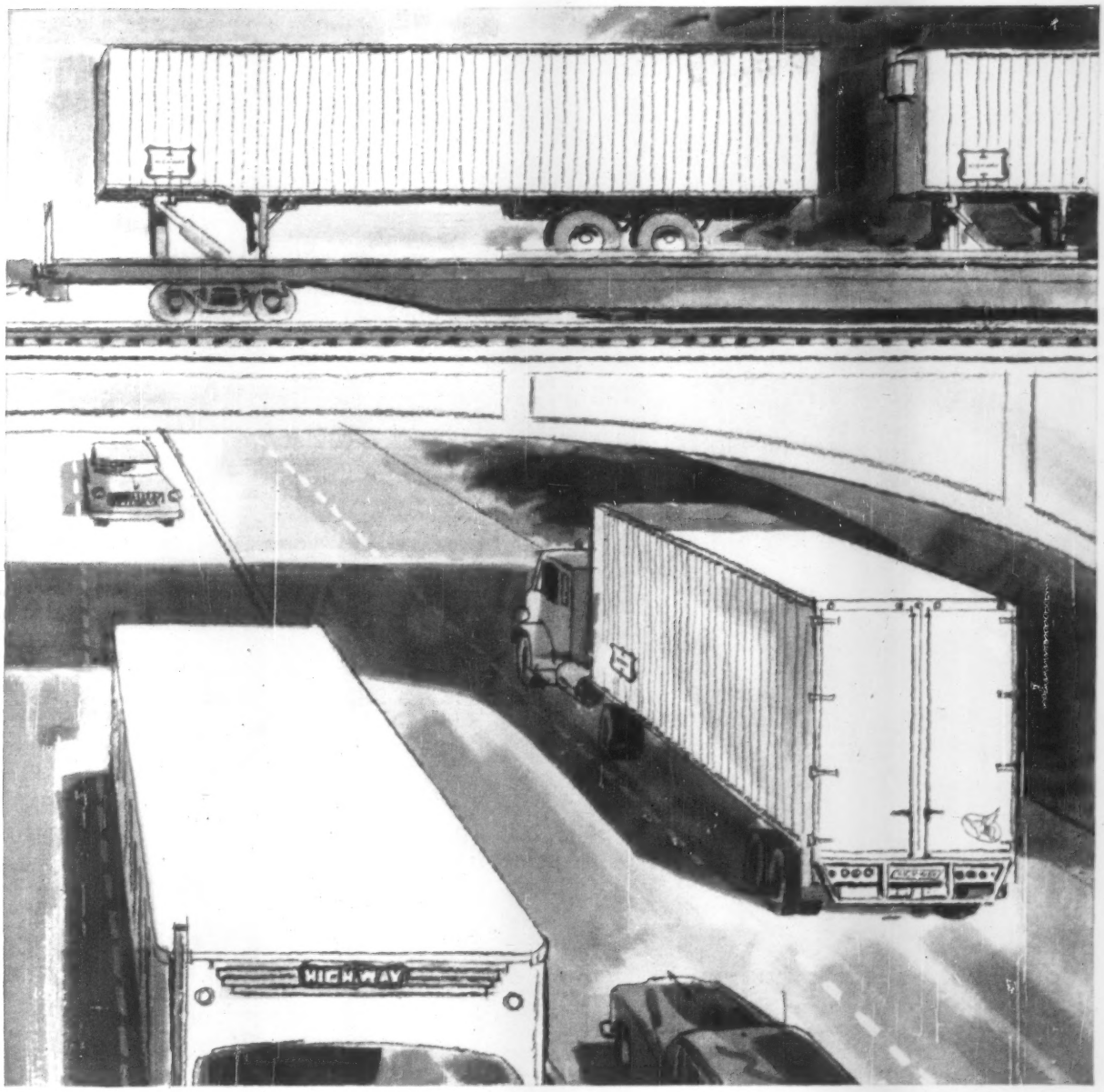
continued on page 82

A Former ICC Commissioner Speaks Out

Transportation has lagged behind the rest of the economy too long, former ICC Commissioner Anthony F. Arpaia has declared. Before his recent retirement he urged a major revision of the ICC act regulating surface transportation. In addition to proposing that all types of carriers—air, water, truck, and rail—should be governed by one regulatory agency, he called for a general relaxation of regulations.

"In spite of amendments to the act," he said, "no substantial and fundamental alteration has been made in the basic approach to transportation. This in spite of tremendously significant developments in our economy, technology, and methods of distribution since the 1930's. Practically every revision of the act and every adoption of a new transportation policy has broadened the coverage of regulation rather than narrowed it.

"Regulated carriers seek to help themselves by imposing stricter controls on everybody else, justifying their action as something that will strengthen public transportation and serve the public interest. I think that regulation covers too broad a field and that the approach should be changed."



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TRANSPORTATION DILEMMA

continued from page 78

- Move less-than-carload shipments more economically in shorthauls
- Extend the benefits of piggyback to more shippers
- Make more economical use of LCL traffic, assembling such shipments beyond the immediate terminal areas.

Says Alfred E. Perlman, president of the New York Central: "Regardless of the money spent for modernization, for proper costing, and a host of other necessities, we will not have a healthy transportation industry unless public policy permits integrated transportation companies to manufacture ton-miles in any manner that best serves the customers' needs."

E. G. Plowman, vice-president—traffic, U.S. Steel Corp., says: "It would be convenient for the shipper to deal with a single agency for what to the shipper is a single transportation movement. Moreover, it would be good to have the skills and experience of the railroad industry equally available when another mode of transportation was used."

The voluntary coordination of different types of carriers is making the most headway where it is most needed—between air carriers and truckers. American Airlines recently announced that joint rates had been set with 200 truckers for the movement of air freight between 575 medium-size communities and 60 major cities. Where previously three bills of lading were needed, one will now do the trick. The shipper has only one source carrier to deal with, and the computation of total rates is simplified in a single-rate tariff. A similar arrangement has been made between United Air Lines and the Railway Express Agency to provide coordinated shipping service to and from points that have no airports.

Mutual respect

Indicative of the growing cooperation between railroads and truckers is the statement of J. L. S. Snead, Jr.,

Even Officials Are Critical

In the wake of the recent Commerce Department study, Under Secretary of Commerce for Transportation John J. Allen Jr. has called for a relaxation of regulation:

"In transportation, regulation often comes between the carriers and the market. Originally it was imposed to protect the shipper against monopoly, but transportation today is competitive, with no one mode dominating the business. In fact, competion is increased by the fact that the shipper himself can provide much of his own transportation if he wants.

"Under modern regulation, if a carrier loses business to another, he is not encouraged to meet the rate or improve his service. Instead, he protests the rate to the regulatory commission, which may hold up his competitor's rate and return some of the business.

"If a new man wants to start a transportation business, or if an established carrier wants to expand, he must seek permission for every detail of the transaction from the regulatory commissions. In almost every case, competitive carriers intervene.

"The basis of our present-day transportation regulation was stated in the Transportation Act of 1920—40 years ago—and the shape of our present regulatory laws was cast in the Transportation Act of 1940—20 years ago—when we had just emerged from a great depression.

"It is certainly time for a fundamental re-examination of our common carrier regulation."

president of Consolidated Freightways Inc., the nation's largest highway carrier: "We are regularly using the services of the Southern Pacific. We have found them willing to change their schedules to meet our needs where volume justifies, and determined to make our joint endeavors mutually profitable."

But whatever the arguments in the common-ownership debate, one thing is clear: Both the manufacturers' demands for low-cost transportation and the recent changes in technology —such as containerization and piggyback—will soon bring either common ownership or coordination.

Says former ICC Commissioner Anthony F. Arpaia, now a Railway Express vice-president: "We will soon be looking back with consternation on the days when railroads, trucks, ships and barges, planes, and pipelines were divided into separate restrictive compartments by a mosaic of tradition, habit, law and regulation, and Government policy. Transportation has lagged behind the rest of our economy too long."

New developments of immediate concern to any company that ships goods are also apparent in the pricing of transportation services.

In judging shippers' and carriers' applications for rate reductions, the ICC has based its decisions not only on whether or not the new low rates would be compensatory, and nondiscriminatory among shippers, but also on the possible effects they would have on other carriers. Railroads and shippers alike have been long-time critics of this approach, and when they saw that the Transportation Act of 1958 included the provision that "rates of a carrier shall not be held up to a particular level to protect the traffic of any other mode of transportation," there was widespread expectation of change.

On the books only

But since then, this new rule of rate-making has been applied in only one important instance—the so-called Paint case. Even there, the ICC warned that its decision was not meant as a far-reaching precedent.

The difficulty is that the new rate-making rule has run head on into the long-established National Transportation Policy directive (included in the Transportation Act of 1940), in which the ICC is urged to prevent unfair or destructive competitive prac-

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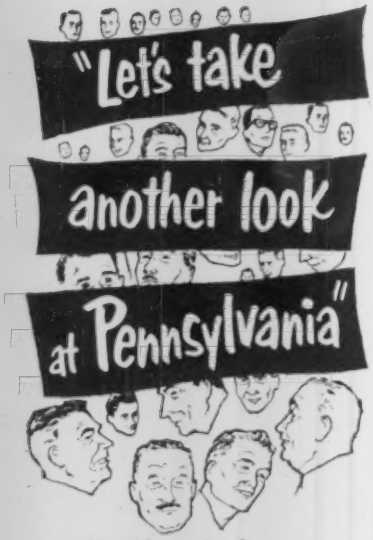

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tices. Carriers and shippers are still waiting for a clarification of this apparent contradiction.

Says George H. Cunningham, general traffic manager, Sterling Drug, Inc.: "The act must be rewritten or interpreted. The ICC has been skirting this issue, and at least one commissioner has pointed out that it must eventually be met. I think it is wrong that on the premise of protecting the public interest, one mode of transportation must hold its rates at a high level merely to permit the existence of another mode of transportation—to the detriment of both the low-cost carrier and those it could serve."

Meanwhile, encouraged by the Transportation Act of 1958, the railroads have been developing unusual techniques in rate-making, in order to make full use of their heavy investment in facilities. These techniques are not entirely new—they were used years ago in Canada and England—but they are making their appearance here for the first time in various industries. They include:

Agreed charges—Reductions in the freight rate are made, in exchange for a guarantee from the shipper that the railroad will get a certain percentage of his total shipments during the year. It applies to small as well as to large shippers.

Volume rates—Also known as multiple car rates, these reductions are given for shipments in excess of carload lots. The reduction can be as much as 15 per cent for multiple cars sent in the same shipment.

Incentive rates—Sizable reductions are given for loading a freight car to a higher minimum weight. The rates are still compensatory to the railroad, since they increase earnings per car and reduce the amount of equipment needed for each shipment.

Pricing has traditionally been based on the theory of charging what the traffic would bear—setting rates by the value of service, not merely by the weight of the shipment, and "making up on the gold what is lost on the coal." High freight charges have been made on shipments with a strong "ability" to pay, to enable carriers to more other products—usually raw materials—with a low "ability" to pay. Since finished goods had long been charged high freight rates, the railroads were highly vulnerable when the truckers offered to move these products at comparable rates while providing better service.

The railroads recognize the need for intensive research on rates, so that they can be related much more closely to the actual costs. Research can also be used to justify requests to the I.C.C. for changes.

Through the use of data-processing equipment and the application of market research techniques, the railroads are now much better prepared to determine the potential income to be derived from future freight movements at various volume levels. But despite the varied attempts to achieve more realistic rate-making, the intricate rate structure itself—involving classifications, exceptions, commodity rates, and tariffs—remains a source of confusion, particularly for the small shipper.

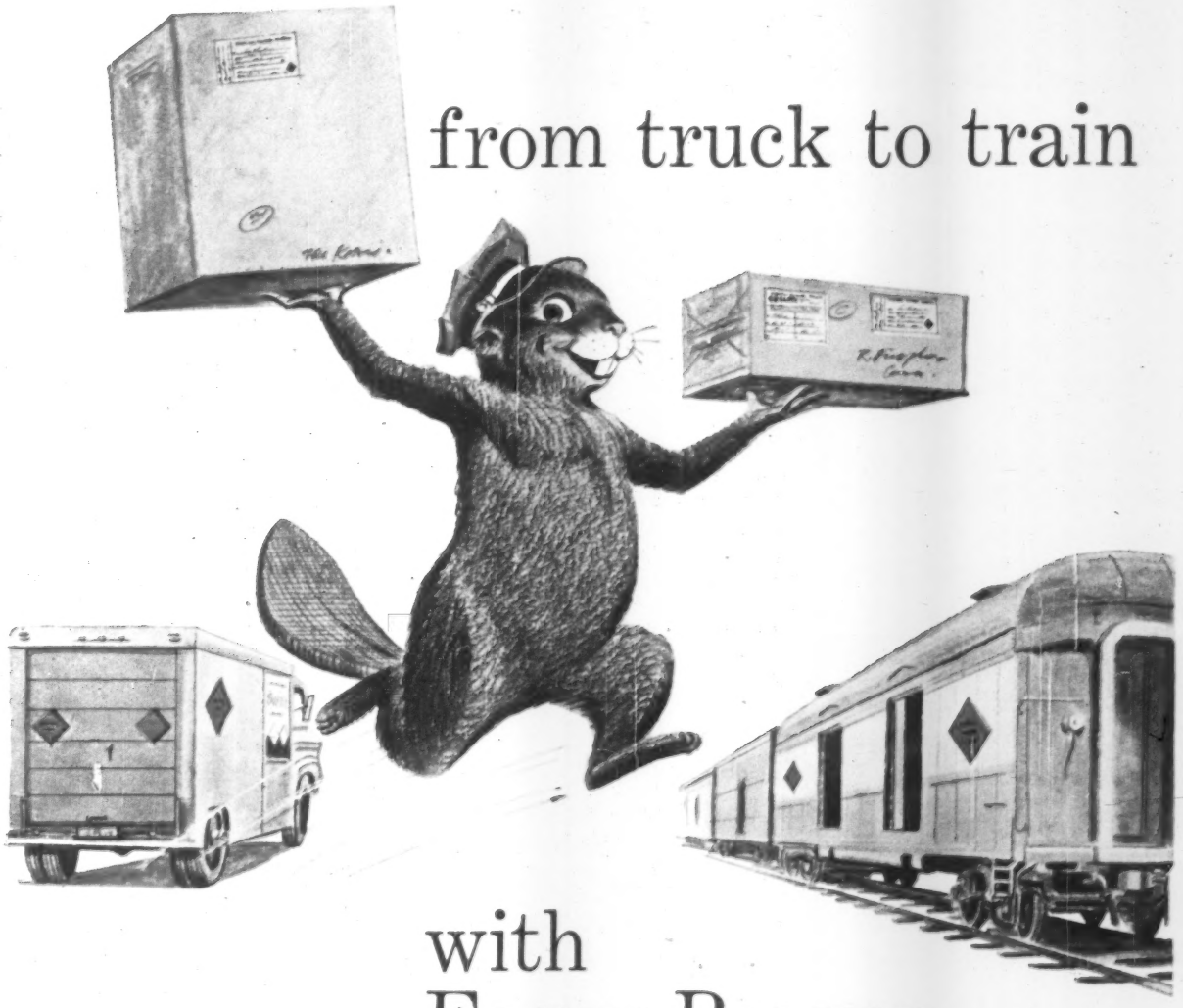
Cumbersome and obsolete

Says a spokesman for the Freight Forwarders Institute: "In the face of unitized loading and easier cost assessment, cumbersome rate techniques are as obsolescent and ready for simplification as was the armor of the medieval knight facing the cannoneer."

If all rates were to approximate the actual cost of each movement more closely—as they would under full competition—there would probably be important changes in the location of plants, warehouses, and other facilities. At present, the cost of transportation is often the determining factor in where a company builds its facilities. On the other hand, regulation—particularly of rates—can be a protection to many small manufacturing companies which don't have the means to set up their own trucking fleets. Through rate regulation, they are assured that even if only one carrier is available, the rates will be comparable to those charged other manufacturers similarly situated in relation to their market.

The importance of even a small extra burden in transportation costs was pointed up by a University of Washington traffic management poll of several hundred shippers. This revealed that a 10 per cent rise in freight rates would seriously injure their marketing positions. And a large majority said that a reduction of only 10 per cent in

from truck to train



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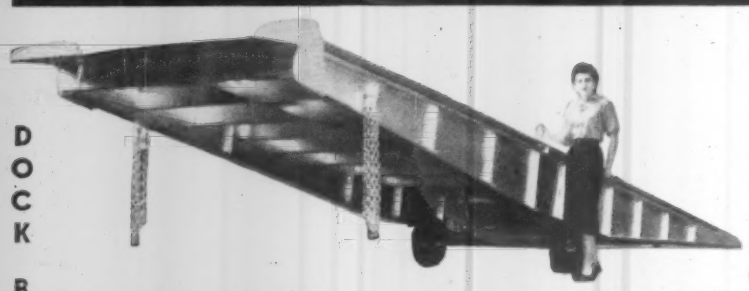

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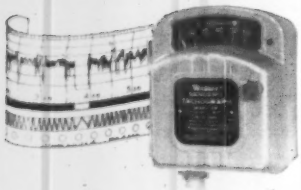

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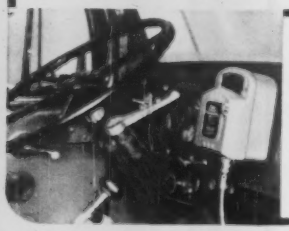

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freight rates would enable them to expand their markets.

Lack of regulation can affect the transportation companies, too. According to the railroad industry, the fact that certain products, which are regulated in railroad movements, can be moved free of regulation by other carriers puts them at a severe disadvantage. For instance, truckers who haul agricultural and horticultural commodities and fish are exempt from rate regulation. Railroads are not. Waterway carriers can move commodities in bulk without rate regulation if no more than three different commodities are transported in the same vessel or tow of barges.

Says a spokesman for the Association of American Railroads: "Railroads are required to publish their charges, to observe them strictly without change, except on 30 days' notice, and to meet standards of reasonableness and non-discrimination.

"We are like a man operating a corner store who is required to write his prices in large letters on his store windows, who is forbidden to deviate from them, and whose prices must meet certain statutory standards, while his competitor on the opposite corner operates under no such compulsions, has only to come across the street to read the posted prices, and is free to charge what he pleases."

The position of the railroad industry has been that regulations force it to focus on cost reduction instead of improvement of service.

Rules still needed

But not even the most outspoken critics of regulatory restrictions among the railroads would welcome complete abandonment of all regulations. Railroads are frequent critics of truckers, barge lines, and other carriers who protest to the ICC over "unfair" rail competition, but they are not averse to invoking the same protection when competition from other railroads becomes serious. The Long Island Rail Road, for instance, recently complained to the ICC about the invasion of Nassau and Suffolk counties on Long Island by the New York Central and DL&W lines which had set up joint piggy-back rates with a trucker.

What can top management in manufacturing do about the tangle of Governmental restrictions in transportation? And what are companies doing

continued on page 89

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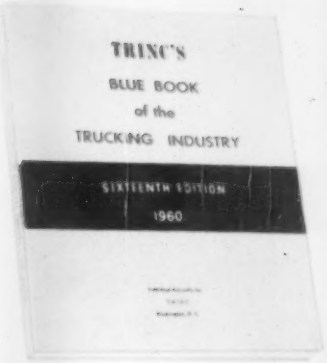

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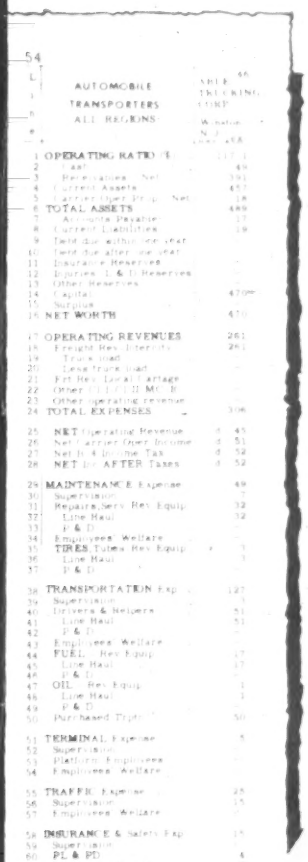

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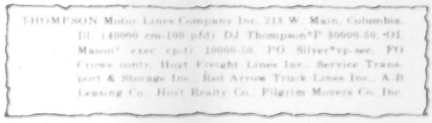

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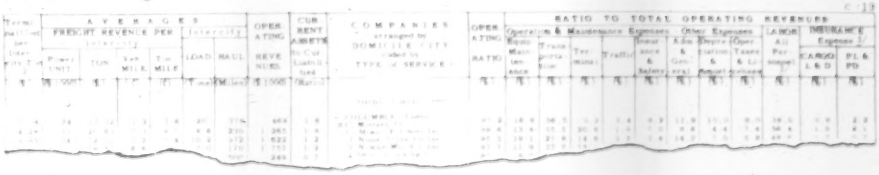

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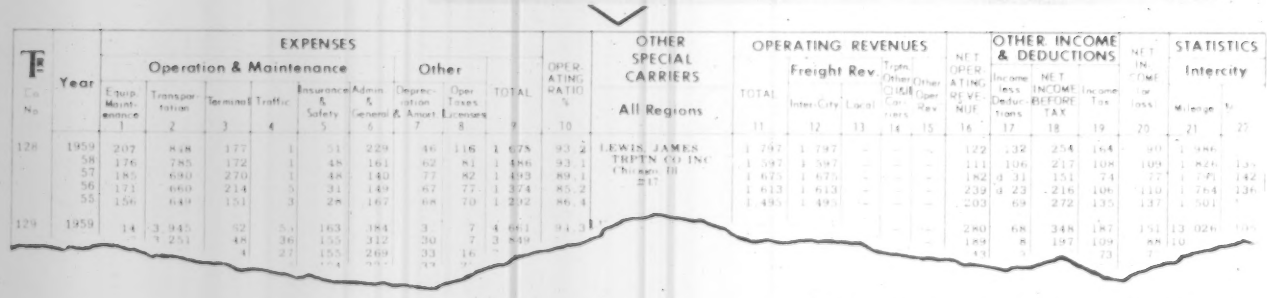

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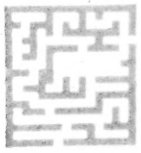
continued from page 86

now to lessen the impact of red tape and regulatory snags on their own shipping operations? Most that have considerable goods on the move must maintain voluminous tariff files and have skilled traffic staffs to negotiate rate reductions, appear at rate hearings, determine classification changes, file claims, and perform the other important chores that can cut the company's freight bill.

While these functions may add to the total cost of transportation for industry in general, given the present regulatory set-up they are essential means of reducing costs.

The interest that top management shows in the traffic department may also bring continuing benefits. If it is clear, for instance, that a relaxation of regulations in a particular transport situation would help the company, top management can encourage the traffic manager to appear and testify at ICC hearings in the company's name. It can also recognize and reward the skills that industrial traffic management employs in coping with—and often overcoming—regulatory restrictions.

And, finally, top management can keep informed on the fast-changing transportation developments that can spell new cost-cutting opportunities in the future. —T.K.



TRANSPORTATION DILEMMA

Tangled Traffic Slows Shipments

Traffic managers, carriers, and cities fight congestion, but a big part of industry's freight bill still goes for trucks slowed and stuck in traffic.

LONG-haul semi-trailers, six-tire trucks, panels, delivery wagons, and some 58 million passenger cars have been crowding one another to a standstill on America's city streets.

And the men who suffer most are the men who ship.

Every statistic, practically every trucker, and almost every manufacturer with a fleet knows the paralyzing effects of growing congestion: delivery and pick-up difficulties, and stop-and-wait traffic.

They agree that the final solution to urban traffic congestion must come from the municipalities themselves. Yet even presuming our cities do ultimately find solutions, the truck operators can't wait.

The choking of urban streets has forced them to find ways and means to cut costs by improving trucks, by "containerization," new scheduling and routing systems, warehouse and terminal relocation, and by seeking greater shipper cooperation.

The municipal governments seek broad solutions to the entire traffic problem. A few of them have dealt specifically with the difficulties of getting freight into and out of the ever-expanding city. But in general it is a question much discussed, much debated—and still unresolved.

W. A. Rusch, who was staff director of the recently disbanded National Committee on Urban Transportation,

reports that something is being done about the problem almost everywhere, but "none of it amounts to much in the long run." He adds, "The problem of moving freight in congested areas is wide open. So little has been done that we don't even have a satisfactory means of measurement."

Many corporations have made it a point to support municipal studies and measures designed to eliminate the perpetual traffic jam. But truck operators and carriers are faced with a more immediate problem. They have to move the goods right now, no matter how crowded the streets may be.

The great postwar boom in trucking resulted in a strong drive toward bigger, more efficient equipment for over-the-road-work. Congestion has brought a similar drive toward smaller, more efficient equipment for work in urban areas.

Evidence of this has been Volkswagen's sale of 30,000 small delivery vehicles last year, White's new PDQ (Pick-up and Deliver Quickly), General Motors' new "Jr. Van." And

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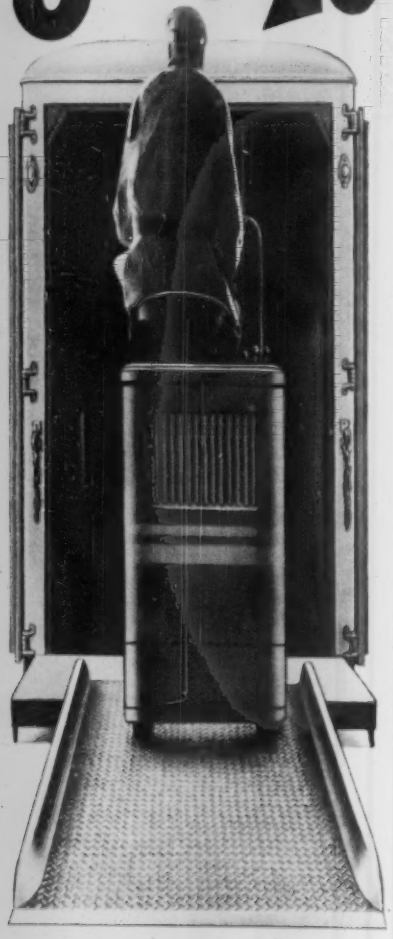

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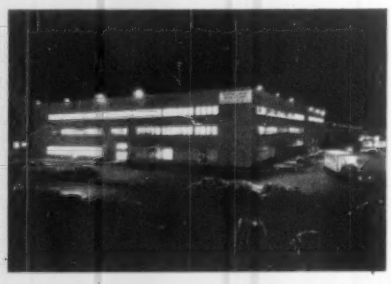


UNION TRUCK TERMINALS: *The Port of New York Authority rents its two big terminals to a group of basically non-competing carriers that use a single local cartage company.*

work is under way on trucks based on the new compact cars.

Some of the largest operators in the nation have experimented with scooter-size units to move their smaller freight. Four major operating companies of American Telephone and Telegraph tried these, but ran into trouble—not because of the size of the scooter trucks but because of a psychological problem: Some drivers felt "downgraded" in such small vehicles and didn't like being squeezed in traffic. Bell Telephone System companies have been working out designs for a forward control, half-ton, multi-purpose vehicle.

It isn't only smaller trucks that companies are seeking. They want comparatively greater carrying capacity. For years, trucks toting big-volume, low-weight loads have required specially built bodies in which every possible inch of space can be utilized. And almost every major operator spells out his individual specifications on side doors, elevators, direct entrance from cab to van, and other features.

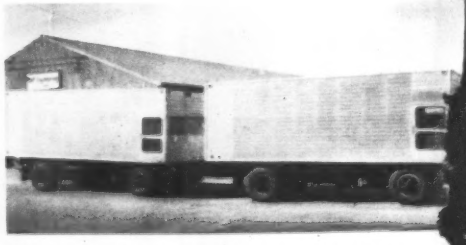
The F. & M. Schaefer Brewing Company has devised what may be the ultimate in truck doors. Its engineering department developed overhead doors for vans, two to a side. When all of them are up, the whole truck is open. It can be loaded fast—and what's more important, in making deliveries the driver has no problem reaching any section of his load.

An increasing number of trucking companies are turning to systems which employ retractable or folding legs on a body that can be detached from the cab of a cartage unit and left behind for loading or unloading (see page 131).

There are still newer developments. The need to transfer less-than-load shipments from road to city equipment is eliminated with new self-powered units that can be attached in tandem, like a truck and trailer. They can be operated on the turnpikes by one driver, then separated for city deliveries.

Truckers are also looking to improved containerization—particularly for the short haul, where dock costs are relatively high. They are studying varied approaches, but almost all agree that standard containers make for more efficiency in making and breaking loads, and in cutting the total number of truck stops in the city. They mean less item handling at shippers' and receivers' dock, too, a big savings in time.

Perhaps the major action which truck operators have taken in the uphill drive for more efficient urban operations has been in the location of truck terminals and warehouses. More and more of the 18,000 for-hire motor carriers in the country are moving



TANDEM WAGONS: *Wolf Engineering Corp. makes a delivery truck that can be hitched in tandem and taken on the road by one driver.*

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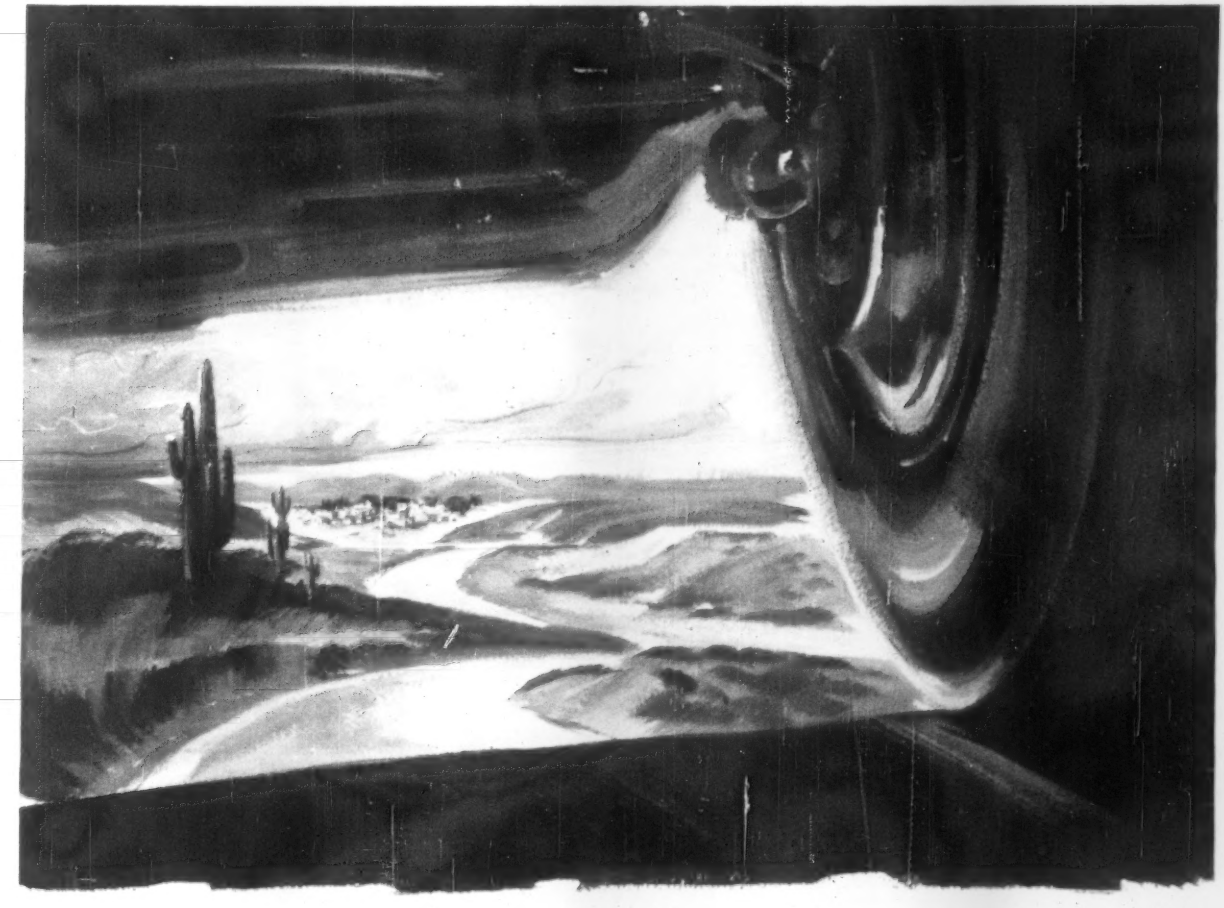

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Like more than 25,000 other U. S. communities, Crazy Horse Junction is fed, clothed and supplied entirely by truck. And helping to keep these vehicles rolling safely, surely and on time is one of the important jobs of Rockwell-Standard.

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Widely diversified, both within and outside the automotive industry, Rockwell-Standard's basic guiding philosophy is the manufacture of products essential to the growth and maintenance of a dynamic economy—to progress through aggressive research, engineering and sound expansion. This has been accomplished through 50 years, by supplying products that know no compromise with the quality standards of the valued customers Rockwell-Standard proudly serves.

This is one of a series of statements to acquaint you with the broad scope of the activities of Rockwell-Standard Corporation.

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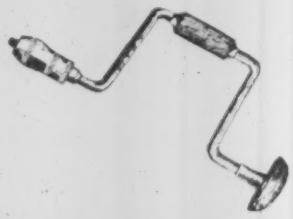

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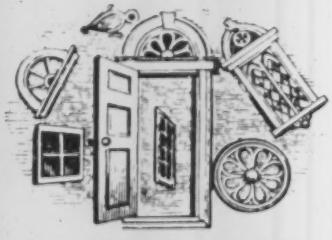

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TRANSPORTATION DILEMMA

their truck terminals from congested central cities to outlying areas near expressways.

The move from downtown has not, of course, been caused only by traffic congestion. Many of the carriers have outgrown their older terminals in the cities, and land costs for new, larger metropolitan terminals are prohibitive.

The key to the outlying terminals is the "break bulk" operation. Freight brought in on over-the-road units is sorted and sent out on smaller deliv-

continued on page 101

Federal Aid Spurs the Cities in their Fight against Congestion

In 1945, there was about 0.1 of a mile of road space for every registered motor vehicle in America. By 1950, the figure was down to .07 of a mile. By 1957, when there were about 67 million registered motor vehicles, each of them had slightly more than .05 of a mile road space.

The number of trucks on the road has been growing steadily. In 1945, there were nearly 5 million. By 1950, the total was up to about 8 million. Last year there were an estimated 11 million trucks of all kinds rolling—or stuck in traffic.

Estimates of motor vehicle registration for the years ahead point to even greater congestion. By 1961, some 77 million vehicles of all types will be using the roads. Ten years later there will be 101 million, and there is little indication that enough roads will be built to match these increases.

It is in the urban areas that motor vehicles today run up almost half their total mileage. And in the years ahead, as the cities gobble up more of the suburbs, and the suburbs more of the countryside, the traffic presumably will get heavier and heavier.

Mayor Richard J. Daley of Chicago, speaking at the recent American Municipal Congress which devoted itself to transportation in the city, laid the problem on the line. He said:

"The increase in size and productivity of our industrial economy has always been related to improvements in transportation facilities. Unquestionably the productive resources of the nation will be substantially improved and expanded by first improving the highways in urban areas.

"It cannot be a question of economy and inflation, because the time truckers lose getting into cities and making deliveries, plus that lost by commuters, must dwarf any travel time gained in between urban centers."

Many cities hope to get road funds under the Federal Highway Act of 1956. With the help of the Automotive Safety Foundation, the U.S. Bureau of Public Roads, the American Transit Association, and eight other national organizations, the National Committee on Urban Transportation—which disbanded this May after six years' service—drew up pilot-city studies and manuals. These are available to municipalities that seek to approach their traffic problems with the long-range planning that is essential.

Such planning begins with a complete inventory of roads, land usage, traffic flows, and the like. It involves two major approaches: the building of expressways and new roads, and the speeding of traffic on existing streets by improving controls, regulations, and facilities.

Many cities have expressways completed, under construction, or in the planning stage. Chicago has finally put through its Congress Street Expressway. Boston has an inner belt freeway. Dallas has a central expressway. Detroit is now building a depressed expressway system. Pittsburgh has put in high-speed expressways and special parking facilities. And Los Angeles is as famed for its freeways as for its smog (though it is talking now of stressing rail transportation to relieve freeway congestion).

The other approach—speeding traffic flow on present city streets—has been notably advocated by Henry Barnes, one of the nation's leading municipal traffic engineers, and by traffic engineers in a number of cities, including Nashville, Tenn., where they have shown how parking regulations, signal controls, one-way and turn regulations, and other effective techniques can increase the flow on some downtown streets by 150 to 250 per cent.

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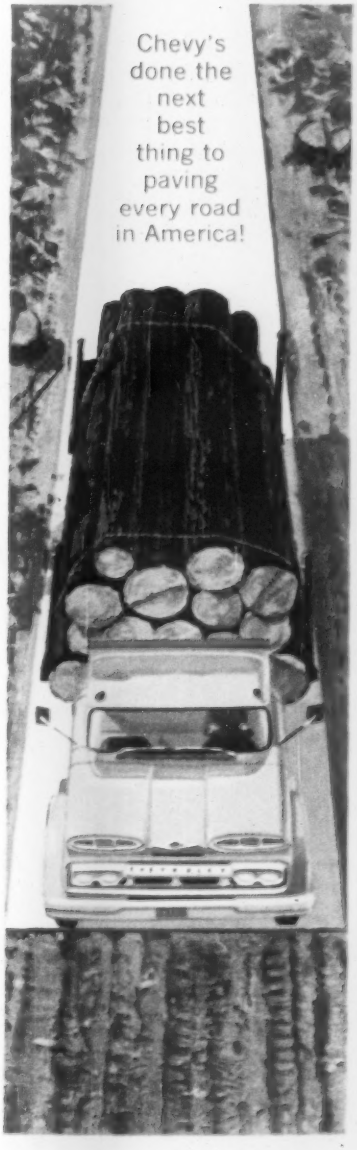

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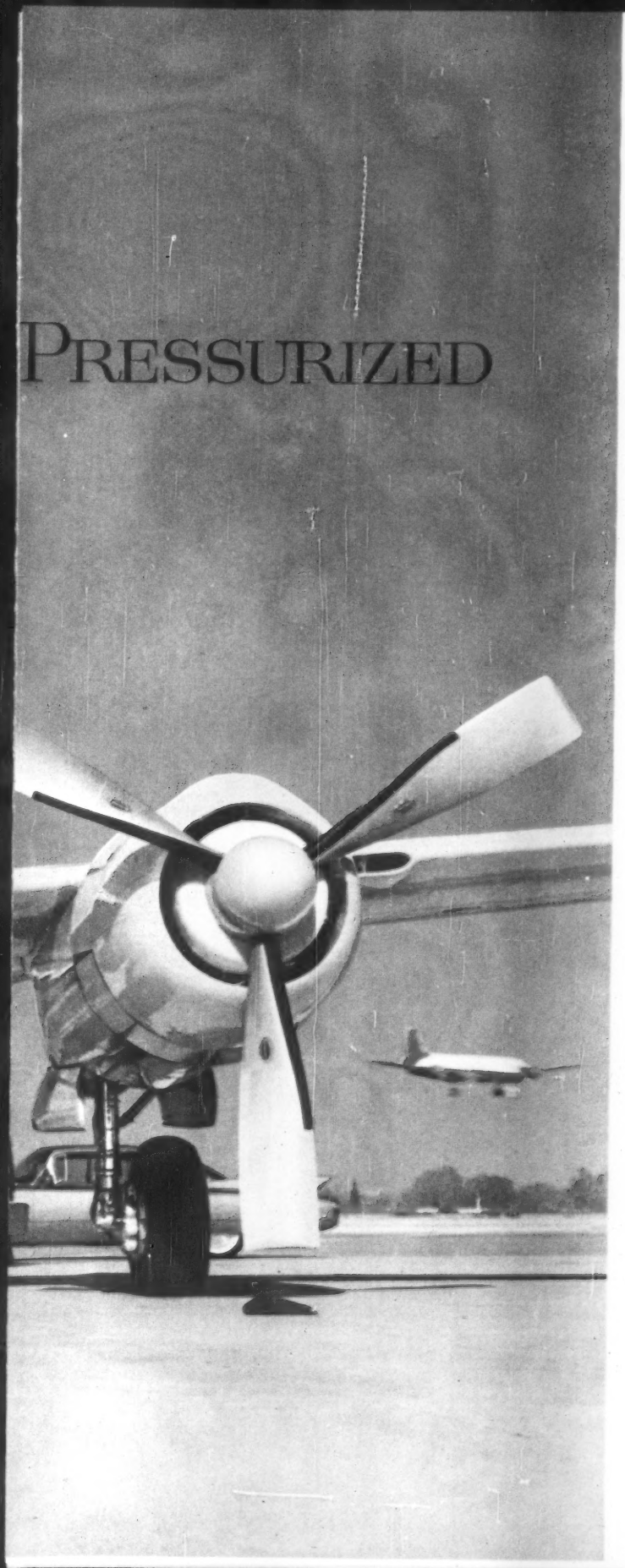

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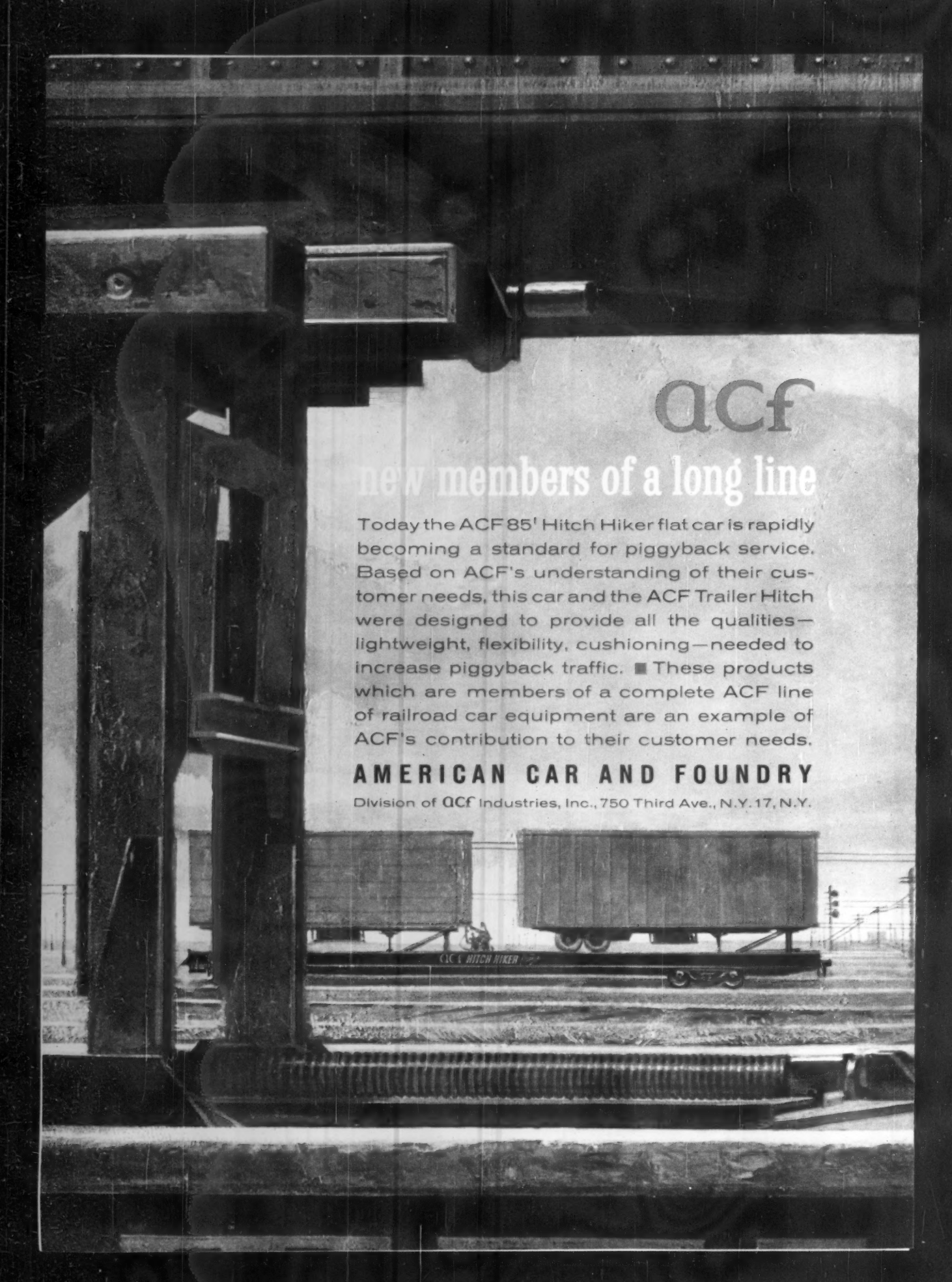
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TRANSPORTATION DILEMMA

continued from page 92

ery trucks to the cities. Similarly, pick-ups are consolidated into one-destination shipments for the big "semi's"—which means, in effect, that there are fewer large trucks moving through crowded areas.

Some traffic engineers would carry this kind of operation one step further. They point out that breaking and consolidating *all* freight at one or a few conveniently located terminals could radically reduce the number of trucks making deliveries and pick-ups. This was the thinking behind the Port of New York Authority decision to establish union truck terminals—the largest in the world—in New York City and Newark, N.J.

A total of eleven carriers operate out of the New York terminal and nine out of the Newark platforms. These eleven lines reach about 94 per cent of the country. More important from the point of view of urban traffic problems, a single cartage company works for all the tenant carriers, reducing the number of trucks stopping at customer or shipper platforms.

But competing carriers have stayed clear of the union terminals. Yale Trucking, which refined make-and-break bulk operations to service New York department stores, has its own huge terminal. Yale's subsidiary, Nationwide Packing Company, Inc., acts as consolidating agent and reshapes loads so that department stores receive goods on the fewest possible trucks at convenient times.

Since competitive factors have so far made joint terminals impracticable on a wide scale, truckers are looking more to terminal areas, like "Terminal City" outside Chicago, where they can build their own facilities close to one another, speed inter-line freight, and cut the cross-hauling of trailers through cities or to other terminal locations. A number of cities have

San Diego Sets a Long-Term Program

Five years ago, the city of San Diego—looking to a "horizon year" population of 2.5 million—decided to attack traffic congestion on a continuing basis.

Since then, it has become the pilot city for field testing of National Committee on Urban Transportation methods. Streets have been widened, made one-way. Freeways have been built, parking facilities developed, traffic speeded up.

In the past, about 20 per cent of the city's income was spent for transportation, without a full-time staff working on long-range traffic planning based on future needs. The keys to the new approach, says Edward M. Hall, the city's Transportation and Research Director, is a realization of the "continuing nature of the traffic problem and the need for regular, repetitive fact-gathering and action. The 'one-shot' approach is inadequate by the time it's carried out."

City engineers have identified traffic-flow bottlenecks, compared the high cost and small benefits of curbside parking, made inventories of roadways, street signs, traffic signals, parking meters, street lights.

In one land-use study, they found that using a different route for a planned expressway would save nearly $400,000. Now they are concentrating on developing major arterial streets.

Last year, they completed a study of existing facilities as part of a "Trucking Inventory" for planning roadway systems and terminal locations and facilities. The next step is to determine routes and travel patterns of trucks operating in the city.

R. M. Middleton, superintendent of transportation and shop, San Diego Gas and Electric Company, says the city's work "has already been a great help to us in saving time and getting our crews, trucks, and equipment to the job." "There is no question," reports Fred Bergen, vice-president of the San Diego Forwarding Company, "that improvements like one-way streets, loading zones, and better traffic control have alleviated congestion downtown. And freeways help us get trucks to and from outlying areas efficiently."

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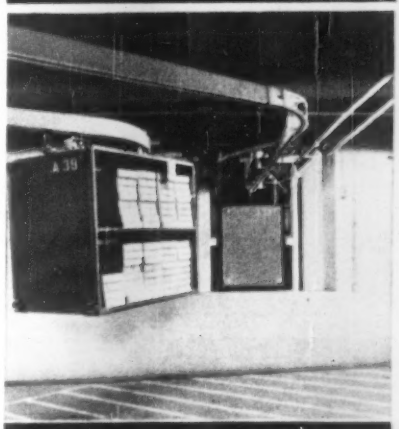

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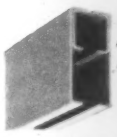

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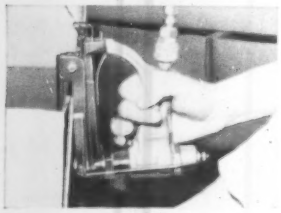

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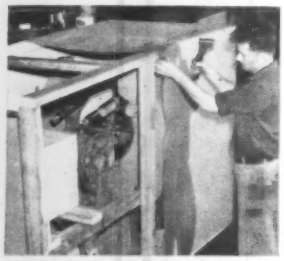

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planned such areas as part of their urban renewal programs.

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Worried Traffic Directors

Whether they use common carriers, operate their own trucks, or both, half of the traffic managers surveyed by DUN'S REVIEW said the problem of getting trucks and goods through congested areas had become more of a headache than ever.

Many report their companies have been supporting municipal moves to deal with the problem, and they have taken all kinds of steps to get their freight through tangled traffic more efficiently.

In general, the traffic managers concentrate their efforts in two areas—locating distribution centers and warehouses just outside congested areas, and night-time loading and scheduling to avoid the rush hours.

"We are building plants nearer markets," reports R. J. Lilley, general traffic manager of the Thatcher Glass Manufacturing Company, "and we are warehousing in transit."

"We try to get less congested gate ways," says F. J. Bauer, traffic manager of the Wincharger Corp.

Efficient scheduling has been a big help for the Westmoreland Glass Company. Traffic manager Dwight V. Johnson reports, "Traffic congestion at our docks is eliminated by scheduling pick-up carriers' time of arrival."

Off-hours scheduling has helped the F. & M. Schaefer Brewing Company. Traffic manager Arthur R. Jones says, "We have started dispatching our trucks that service the metropolitan area of New York City at 5:30 a.m. Heaven only knows what we'll do in the future."

Many traffic managers also have taken steps to consolidate pick-ups and deliveries through use of local cartage groups. John A. Willert, traffic manager of Mystik Adhesive Products, Inc., says, "We are now working on a plan to consolidate all shipments in as few carrier services as possible. And we are thinking of using only one carrier service in the future."

Good routing helps, too. "We pay closer attention to routing of com-

truck operators, as well as carriers, have concentrated on the sensible location of terminals, warehouses, and depots, and on utilizing make-and-break loading.

More and more often, they have been locating depots outside congested areas so that over-the-road units can be used efficiently for the longest

Battle Urban Congestion

pany trucks," says George F. Burley, vice-president of trade relations for the Crane Company, "and we relocated shipping and receiving facilities to find better traffic patterns."

R. H. Heilman, director of transportation in the A. O. Smith Corp., reports, "We have attempted to standardize routings to eliminate duplication of service by various trucking companies. We also believe that the increasing use of piggyback will relieve the situation somewhat."

A number of other traffic men point to piggyback, containerization, and palletization as technological advances that give solid help in moving freight through crowded streets.

Traffic men are generally aware that it is the cities and the traffic associations who must attack the congestion problem over the long run.

They suggest three major areas for improvement: parking facilities, improved roads and freeways, and municipal regulations scheduling truck deliveries for off hours.

Richard D. Hornick, traffic manager of the Elder Manufacturing Company, suggests that cities "make trucks stay off certain thoroughfares during morning and evening rush hours; plan ahead for the expressways of the future, and perhaps have the carriers band together for a municipal dray service. Instead of having carriers make pick-ups direct, let a selected draymen handle a specific area."

Many of the traffic men noted that congestion is primarily caused not by trucks but by private automobiles. Traffic manager T. N. Hackney of the Franklin Manufacturing Company says: "Sound commuter systems should be worked out in those cities which can build them."

The traffic men also called on cities to speed consolidation of carrier terminal areas. Robert V. Friedman, traffic manager of Universal Match Corp., said cities should "make available large tracts of land for truck terminal 'villages' or centers."

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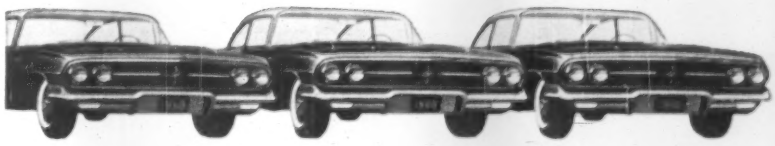

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Find any vantage point in Cincinnati. Look in any direction. The evidence of this area's tremendous vitality is everywhere. Traffic is already flowing smoothly over newly-completed expressways.

Additional miles of concrete are taking form to shrink still further the already short distances between home and work . . . between new suburban developments . . . and between city and airport. Broad urban areas now stand cleared of slums, ready for planned new apartments, office buildings and plants. A quarter of a billion dollars in federal and local funds are being spent to give this area the newest new look in America by 1962.

Private capital has been busy changing the downtown skyline, too. Newly-completed dam construction is putting a 95-mile long "lake" at the city's front door to add to its already impressive recreational attractions.

Yes, there are lots of reasons beyond this area's more obvious ones of favorable geography for choosing it as the location for your new plant or headquarters office. Could we talk about some more of them? Soon?

For complete and confidential *information about the Greater Cincinnati Area relating to your own specific problems and needs, write Mr. Ernest S. Fields, President, The Cincinnati Gas & Electric Company, Cincinnati, Ohio.*

The Cincinnati Gas & Electric Company

The Union Light, Heat and Power Company

Serving homes and industry in the Greater Cincinnati Area with an adequate and dependable supply of gas and electricity.

hauls, and delivery trucks can be in service, actually delivering, as much of the time as possible.

One company that has a number of customers located far from the nearest depot sends large trucks out during the night, then transfers loads to smaller delivery trucks "in the field." Drivers who live in the neighborhood start work on deliveries first thing in the morning.

There has been a general effort to get trucks out on and through the streets during the night and early morning hours. But good route selection alone can help overcome congestion problems, no matter what the time of day. Swift and Company found the question of routing efficiency worth a full engineering study. The company developed an "efficiency percentage" formula for work performance of its delivery trucks. A low efficiency rating automatically means a route study by a supervisor. The formula includes such factors as weight delivered per stop, miles driven, time spent *en route*, and number of stops.

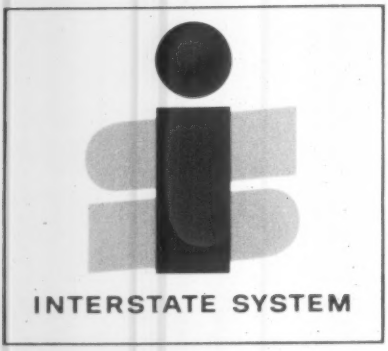
Improved routing helps

Several companies have developed numerical routing systems. They lay out the best routes in heavy traffic areas, give every customer or potential customer a consecutive number along the "best routes," and put these numbers on all order and delivery tickets. Both loader and driver then get an automatic routing by simply putting the tickets in numerical order. Other firms have adopted Post Office zoning for their routing as a simple method of standardization.

But none of these methods attack what many experts consider one major problem in urban trucking: shipper facilities for receiving and dispatching freight.

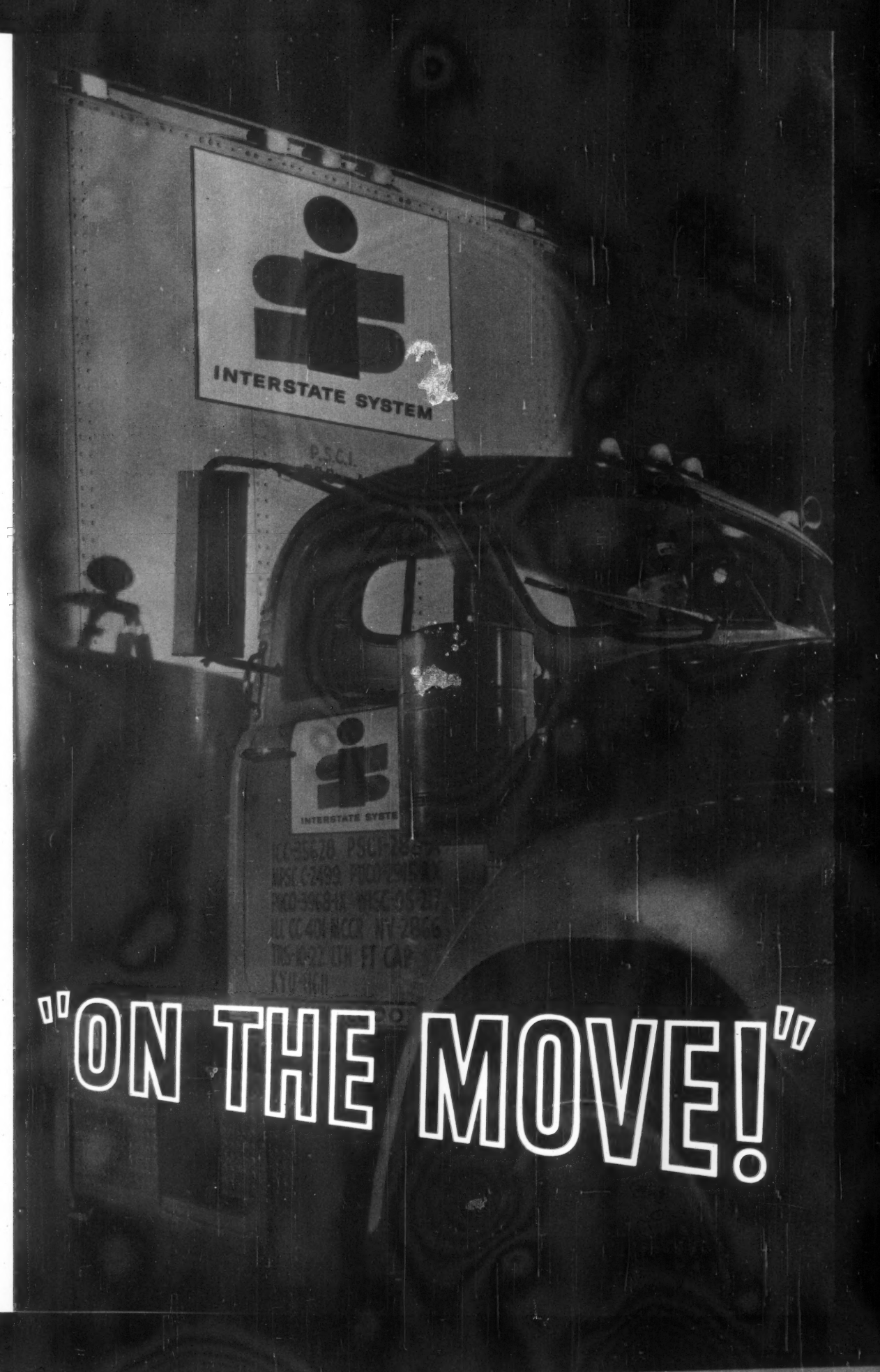
The American Trucking Associations, Inc., and other groups have long been working for greater cooperation between shipper and carrier. Getting this kind of cooperation is complicated by the fact that most carriers have many shippers—and shippers, in turn, often rely on several carriers.

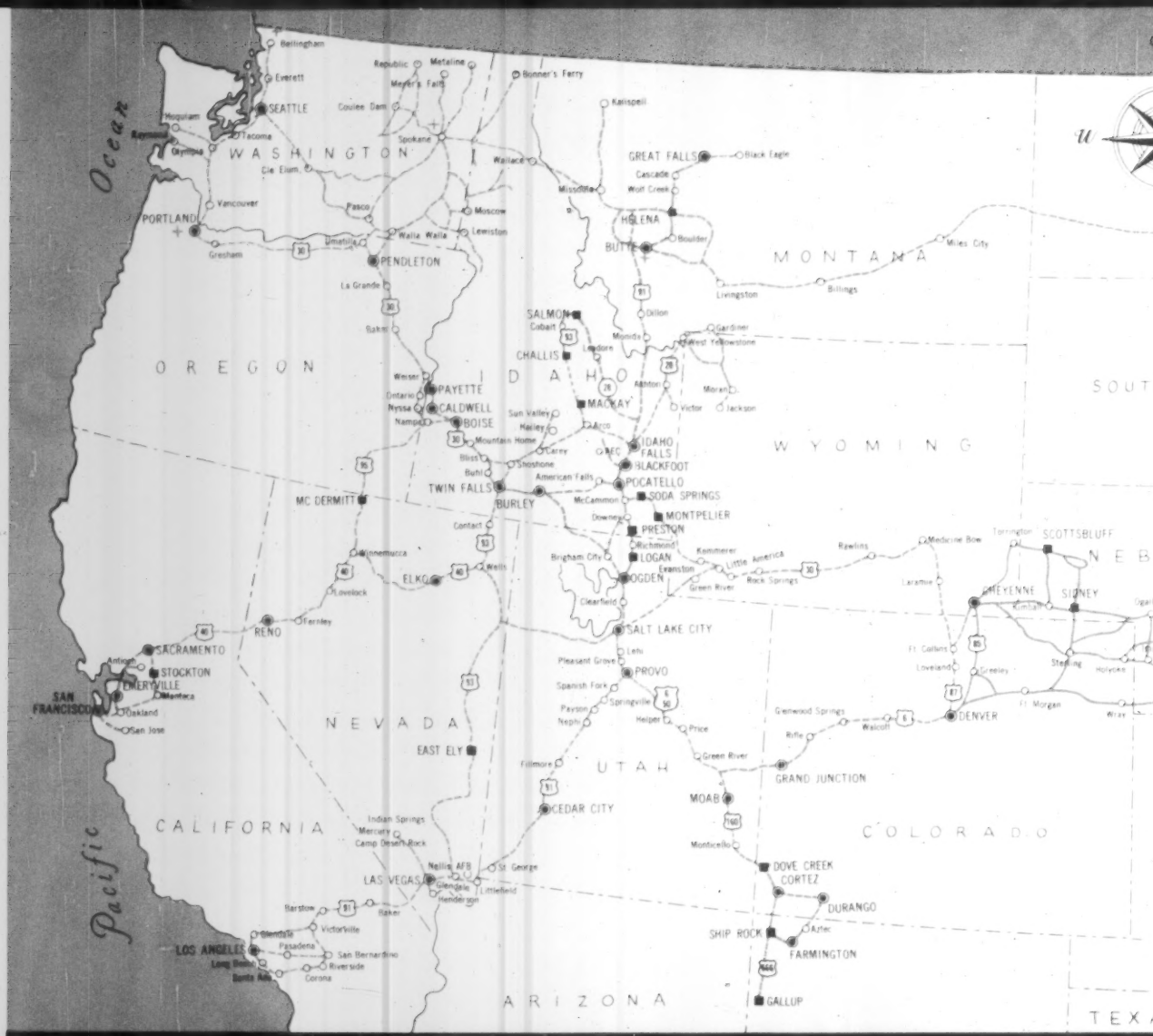
U.S. Trucking Corp., the largest short-haul trucker in the nation, says



This is the story of a fast-growing, fast-moving motor carrier. Understand, we are not talking about just another truck line. We are a transportation system. Our authority is extensive: we serve over 9,000 points in 24 states through 78 company-owned terminals, with special emphasis on less-than-truckloads to small towns. In America's industrial heartland, we carry more freight than any other motor carrier in the country. And, we have the equipment, the facilities and the experience to give you the swift, safe, economical service you want. Call us for your next shipment. Your local Interstate System terminal is listed in the Yellow Pages — and on the back cover of this folder.

INTERSTATE SYSTEM GRAND RAPIDS, MICHIGAN

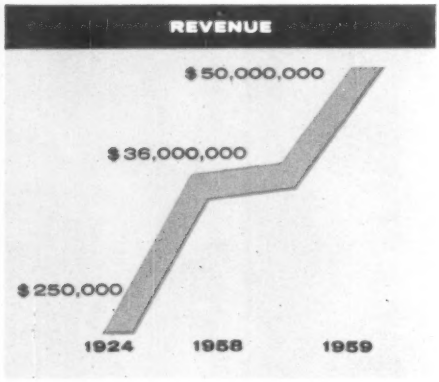

INTERSTATE SYSTEM
"ON THE MOVE!"



MORE THAN A TRUCK LINE

AMERICA'S FASTEST GROWING MOTOR FREIGHT SYSTEM

	PATTERN FOR GROWTH
1924	TERMINALS — 8
	AUTHORITY — 4 STATES
	VEHICLES — 148
	ROUTE MILES — 1,375
	EMPLOYEES — 108
1959	TERMINALS — 78
	AUTHORITY — 24 STATES
	VEHICLES — 3,350
	ROUTE MILES — 23,013
	EMPLOYEES — 4,200



A TRANSPORTATION SYSTEM

EXCEPTIONAL SERVICE

Direct service to important markets. We provide reliable service to nearly every crossroad on the map. It's possible only with a direct, single-line carrier. Faster, too.

LTL Service. Direct, single-line, time-tabled LTL Service, the fastest, most dependable in the country.

Coast-to-coast. Guaranteed thru rates to or from West Coast points as named in Rocky Mountain tariffs via Garrett Freightlines. Rates, schedules, times, etc., on request.

Distribution tariffs. Allow shippers to cover multiple markets at less cost than applicable LTL rates. Saves you time and money. Ask us!

Time schedule merchandise runs. Over 260 *daily* timed departures and arrivals. Shipments leave on time; arrive on time. Fast, dependable. No delays, waiting for loads to be made up.

Import — export and Canadian service. Broad experience routing foreign, domestic freight by land, sea. Canadian offices: Toronto, Montreal.

Direct service to/from Puerto Rico. With Pan-Atlantic Sea-Land Service. Substantial savings — no special preparations. From anywhere in our system.

Claim-free shipments. Our record is only one claim for every 189 shipments — and we settle 8 out of 10 in 30 days.

EQUIPMENT

NEW TERMINALS. We maintain
in 78 key cities in 24 states,
with the newest in handling eq
line system in our Buffalo, N
typifies materials handling eff

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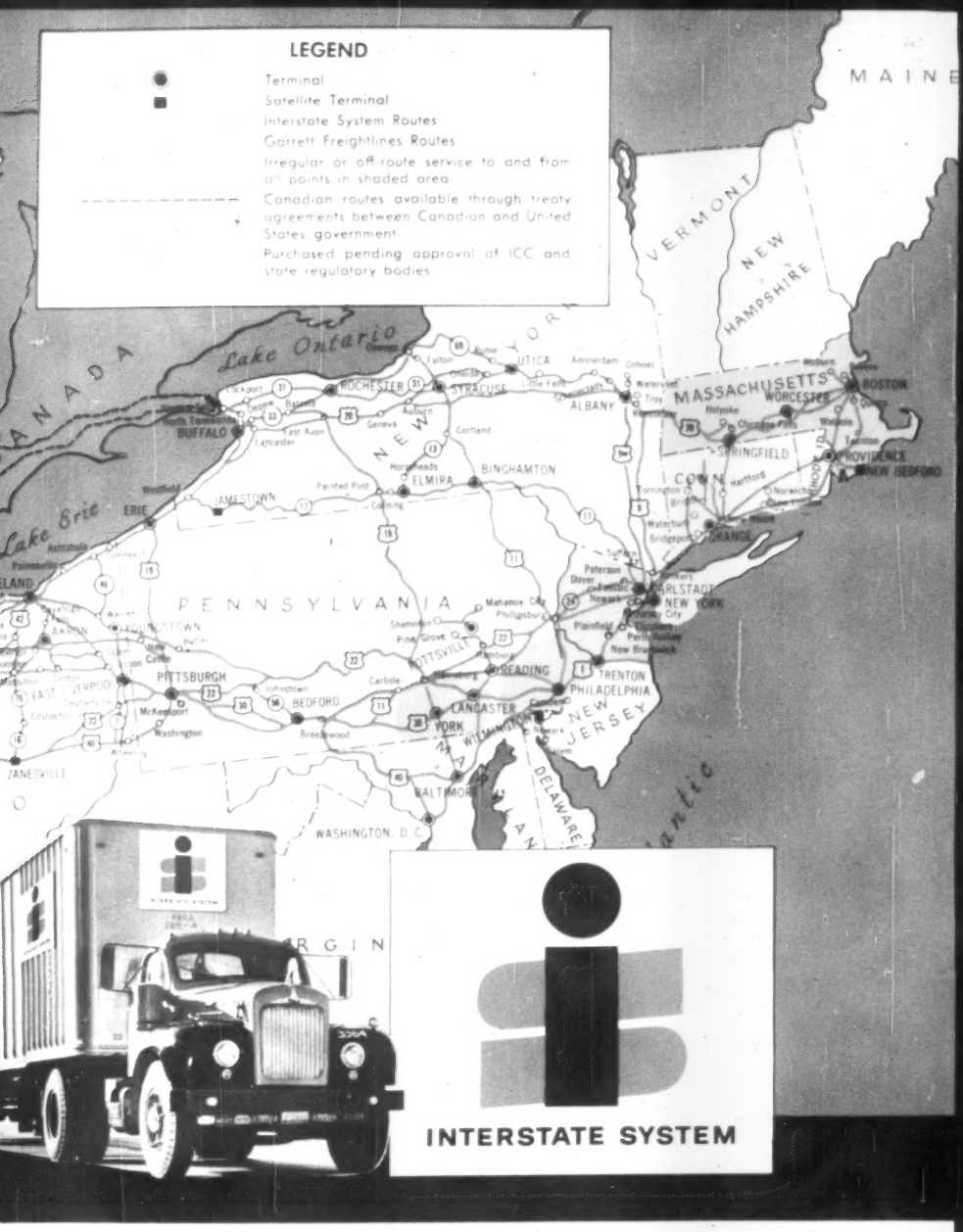
typifies materials-handling e



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ma ntain modern terminals
4 states. Each is equipped
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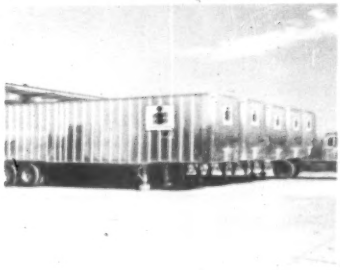
uffalo, New York, terminal
dling efficiency.



NEW TRACTORS AND TRAILERS. We've just added 150 more of these 40-foot vans to our fleet to provide extra capacity for your TL and LTL shipments. And our entire system is equipped with new, rugged heavy-duty diesel power units.

FULL-TIME TRANSPORTATION CONTROL. Private long-line telephone circuits maintain continual 24-hour contact with all terminals in the system, enabling our dispatchers to pin-point shipments in minutes, wherever they may be.

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His function is to provide you with the swift, safe, dependable transportation you want — on both inbound and outbound freight — and to save you money doing it. Put him to work for you. Just call the number of the terminal that's closest to you.

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165 Case Ave.
Republic 3-6247

ALBANY 5, NEW YORK
Albany-Shaker Road (P.O. Box 5027)
State 5-6664

BALTIMORE 30, MARYLAND
1707 Wicomico St.
Vernon 7-8888

BATTLE CREEK, MICHIGAN
54 Avenue C
Woodward 2-5494

BEDFORD, PENNSYLVANIA
Highway 220 N. (P.O. Box 353)
Bedford 513

BENTON HARBOR, MICHIGAN
M-139 and Nickerson Rd.
Walnut 5-2127

BETTENDORF, IOWA
3708 Elm St.
5-4717

BINGHAMTON, NEW YORK
67 Elm St.
Raymond 2-7269

BOSTON, MASSACHUSETTS
91 Mountain Road
Highlands 2-2100
(BURLINGTON)
Browning 2-1700

BUFFALO 20, NEW YORK
534 Hopkins St.
Fairview 9456

CARLSTADT, NEW JERSEY
250 Paterson Plank Road
Webster 3-4700
(See New York Sales Office)

Wisconsin 7-5500
Humboldt 2-1737

CHEYENNE, WYOMING
2311 Reed St.
Cheyenne 4-4621

CHICAGO, ILLINOIS
5401 W. 37th St., Cicero, Illinois
Bishop 2-3700

CINCINNATI 37, OHIO
7623 Production Drive
Poplar 1-6200

CLEVELAND 35, OHIO
13775 Brookpark Road
Clearwater 2-4350

COLUMBUS 4, OHIO
3616 Fisher Road
Broadway 6-5221

DAYTON 4, OHIO
1509 Stanley Ave.
Baldwin 2-1293

DENVER, COLORADO
5150 Monroe
Tabor 5-3347

DES MOINES, IOWA
523 S.E. 20th St.
Amherst 6-5187

DETROIT 34, MICHIGAN
13400 Girardin Ave.
Forest 6-5134

EAST LIVERPOOL, OHIO
West Fourth Street Extension
Fulton 6-5401

ELMIRA, NEW YORK
951 Grand Central Ave.
Regent 4-8177

ERIE 7, PENNSYLVANIA
324 East 19th St.
Glendale 4-0614

EVANSVILLE 11, INDIANA
321 North Kerth
Harrison 5-7159

FLINT 7, MICHIGAN
4025 N. Dort Highway
Cedar 5-8533

FORT WAYNE 7, INDIANA
1130 W. Main St.
Anthony 5366

GRAND RAPIDS 2, MICHIGAN
235 Grandville Ave., S.W.
Glendale 9-4201

GREENCASTLE, INDIANA
Martinsville Ave. and Zinc Mill Rd.
Oliver 3-5141

INDIANAPOLIS 21, INDIANA
1560 W. Raymond St.
Melrose 2-5461

JACKSON, MICHIGAN
209 W. Monroe St.
State 9-8174

KALAMAZOO 19, MICHIGAN
1421 Healy St.
Fireside 3-1581

KANSAS CITY, KANSAS
Ohio and Market Sts.
Drexel 1-6513

KOKOMO, INDIANA
110 E. Morgan St.
Gladstone 7-5361

LANCASTER, PENNSYLVANIA
Manheim Pike, Box 539
Express 4-2683

LANSING 5, MICHIGAN
1010 Ballard St.
Ivanhoe 5-9406

LINCOLN, NEBRASKA
201 "O" St.
Hemlock 5-3222

LOUISVILLE 1, KENTUCKY
3435 S. 7th Street Road
Melrose 5-5251

MILWAUKEE 14, WISCONSIN
4525 W. Burnham
Evergreen 4-3600

MINNEAPOLIS (ST. PAUL), MINNESOTA
2193 Kasota St., (St. Paul)
Midway 5-9271

MUNCIE, INDIANA
2901 S. Gharkey St.
Atlas 2-2269
(ANDERSON)
3-6204

MUSKEGON, MICHIGAN
1940 Commerce St.
Parkway 2-6606-07

NEW YORK 18, NEW YORK (Sales Office)
(See Carlstadt Terminal)
625 8th Ave.
Pennsylvania 6-0520

NORWALK, OHIO
Route 20 E. (P.O. Box 380)
2-8531

OMAHA, NEBRASKA
2615 N. 11th St.
Atlantic 0484

ORANGE, CONNECTICUT
Carlson Road
Sycamore 5-9784
(BRIDGEPORT)
Edison 4-4024
(HARTFORD)
Jackson 5-7156

PEORIA, ILLINOIS
2006 Griswold S.
7-7755

PHILADELPHIA 34, PENNSYLVANIA
2931 E. Tioga St.
Garfield 5-3300

PITTSBURGH 1, PENNSYLVANIA
153 50th Street
Mayflower 1-3192

PONTIAC 20, MICHIGAN
117 Brush St.
Federal 4-3561

PORT HURON, MICHIGAN
2126 Lapeer Ave.
Yukon 5-9571

POTTSVILLE, PENNSYLVANIA
250 Peacock St.
Market 2-6981

PROVIDENCE, RHODE ISLAND
50 King St. (Johnston, Rhode Island)
Temple 1-6966

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Franklin 4-2297

ROCHESTER 6, NEW YORK
979 Mt. Read Blvd.
Glenwood 3-0723

SAGINAW, MICHIGAN
2750 Bay Road
Swift 2-9662

SIOUX CITY, IOWA
510 Third St.
8-1810

ST. LOUIS 6, MISSOURI
69 W. East Grand Ave.
Central 1-6050

ST. PAUL 14, (MINNEAPOLIS) MINNESOTA
2193 Kasota St. (St. Paul)
Midway 5-9271

SOUTH BEND 21, INDIANA
2102 Davis Dr.
Atlantic 7-1511
(ELKHART)
2-3184

SPRINGFIELD, MASSACHUSETTS
657 Meadow, Chicopee, Massachusetts
Lyceum 4-6637

SYRACUSE 1, NEW YORK
15 Dippold St., Mattydale, New York
Glenview 4-2441

TERRE HAUTE, INDIANA
25 Eagle St.
Crawford 9659

TOLEDO, OHIO
215 City Park at Swan Creek
Cherry 1-3181

TRENTON, NEW JERSEY
243 Stokes Ave.
Owen 5-7683

UTICA, NEW YORK
Truck Route 5A (P.O. Box 31, Yorkville, N. Y.)
Redwood 6-3041

WASHINGTON, D. C.
3005 Kenilworth Ave.
Bladensburg, Maryland
Union 4-8010

WATSEKA, ILLINOIS
610 East Walnut Street
Idlewood 2-2938

WORCESTER 4, MASSACHUSETTS
13 S.W. Cut Off
Pleasant 7-5661

YORK, PENNSYLVANIA
501 S. State St.
3-3851

YOUNGSTOWN, OHIO
58 Hubbard Road
Riverside 6-8461
(WARREN)
Enterprise 8461
(NILES)
Enterprise 8461

SATELLITE TERMINALS

JAMESTOWN, NEW YORK
Allen Street Extension
5-1809

MANSFIELD, OHIO
328 North Diamond
Lafayette 2-7554

NEW BEDFORD, MASSACHUSETTS
281 North Water
Wymon 7-4371

NORTH PLATTE, NEBRASKA
703 E. 7th St.
Lennox 2-5142

SCOTTSBLUFF, NEBRASKA
P.O. Box 748
1532

SIDNEY, NEBRASKA
P.O. Box 211
2220

SPRINGFIELD, OHIO
Rear 273 Selma Road
Fairfax 2-4112

WILMINGTON, DELAWARE
305 Hazeldell Ave.
Olympia 2-1145

ZANESVILLE, OHIO
1502 Woodlawn Ave.
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INTERSTATE SYSTEM General Offices: 134 Grandville Ave., S. W., Grand Rapids 2, Michigan • Glendale 6-5351 • Canadian Offices: Toronto, Montreal

that pick-up and delivery are the worst of all problems. The waiting time spent at shippers' and receivers' docks —with trucks sometimes lined up for blocks before they even get to the docks—is what keeps costs and rates up.

But as U.S. Trucking points out, the problem of getting better shipper cooperation can't be solved by any carrier on his own. The business is too competitive.

Some cities, notably Denver, require receivers to have men on hand to unload incoming freight. They have ordinances limiting the distance a driver can go from his truck.

A number of other cities have looked into off-hour deliveries and pick-ups, but so far the expense is prohibitive. Most municipalities, however, insist that all new buildings have off-street parking facilities for loading and unloading vehicles.

But the real need—carriers, operators, and shippers agree—is more cooperation, harder study of the problem, and more objective efforts to handle freight sensibly in our traffic-jammed cities. —J. R. M.

TRANSPORTATION DILEMMA

Featherbedding Pads the Bill

On the rails, the roads, the docks, and in the air, "make-work" costs the American shipper millions each year. Can the carriers do away with all the unneeded jobs and give tomorrow's industry the efficient, flexible service it will demand?

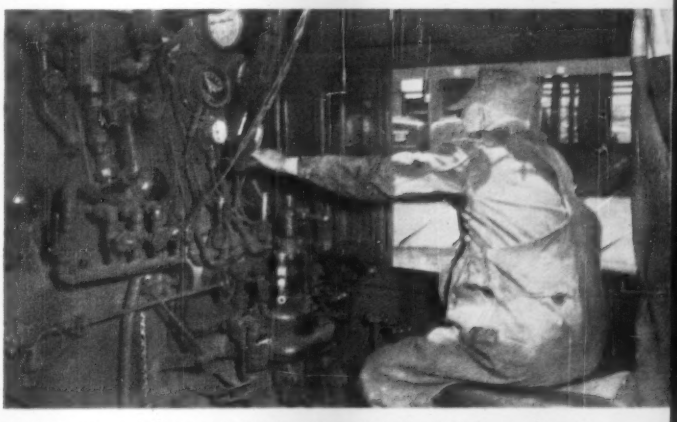
Make-Work on the Rails

"You can see the railroad classification yard from our plant," says a big Eastern shipper. "It's not more than 50 yards away. But we can't get cars put on our siding, no matter how 'hot' the cars are for us, except at the scheduled time for a switch."

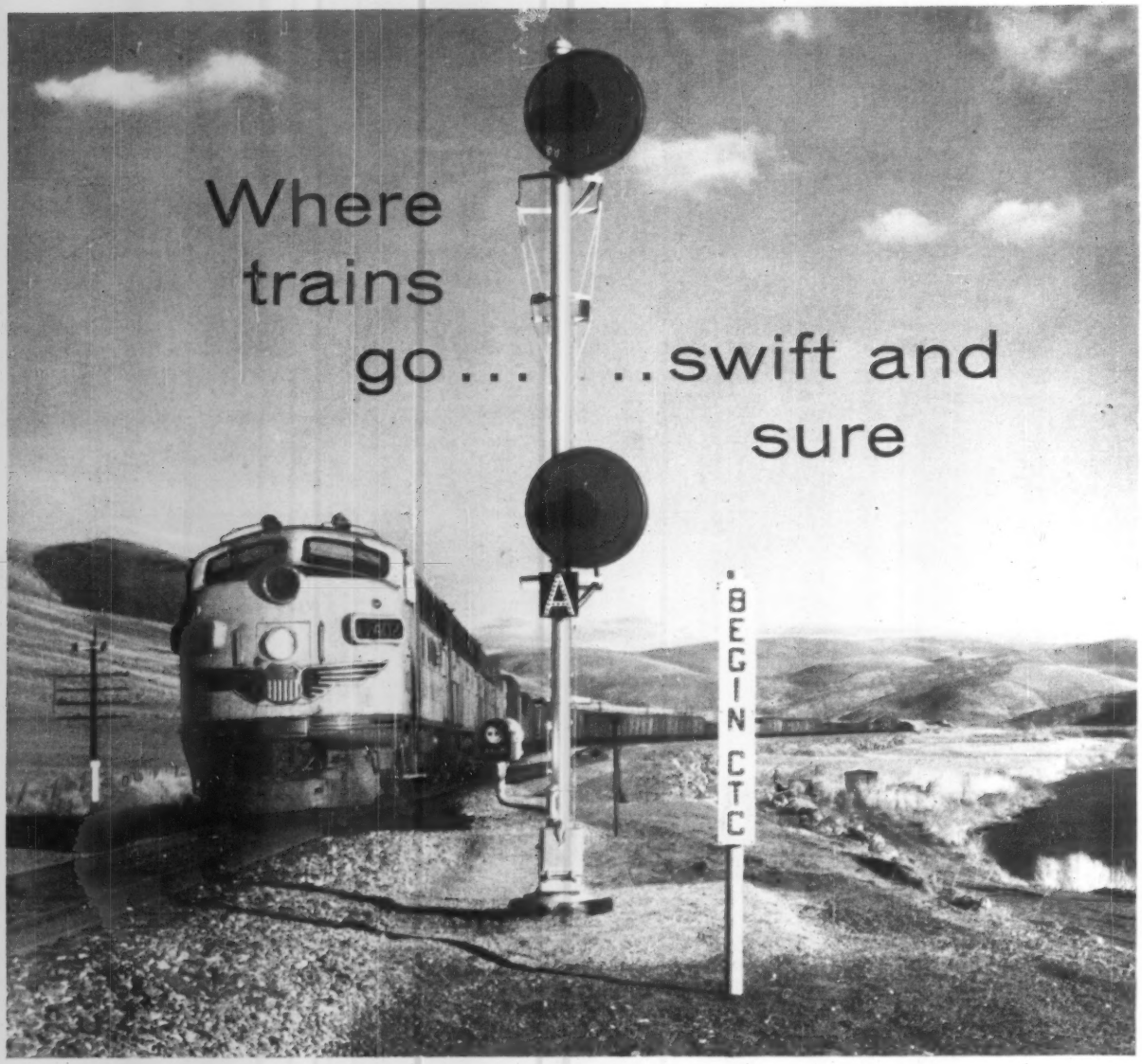
Another shipper who uses rails for his freight reports, "Sometimes we don't get an answer when we use the radio to contact the switch engine assigned to our area. The engine crewmen won't answer. They claim a special radio operator should be assigned. But they have so many men riding the engine I don't know where they'd put another one if they got their way.

The traffic manager of a major manufacturing company claims, "Because of working time regulations, switching crews have to stop work for hours within just half a mile of one of our plants. We lose hours of loading time, plus delays in shipments."

Outmoded railroad work rules result in more than just inefficient service to shippers. A. C. Roy, director of traffic for Pennsylvania Glass Sand Corp., points out, "Work rule restrictions that make carrier operations



IS THE FIREMAN STILL NEEDED? *Major issue in the railroads' fight against featherbedding is the fireman, once essential in the cab of the complicated steam freight locomotive, right, but hardly needed in the simply-controlled modern diesel cab, left. Firemen's jobs were written into contracts back in 1937, long before the diesel engine had replaced the steam locomotive.*



CTC works both directions, guiding trains either way. By the automated signals and switches of CTC operation, traffic is guided across the West. Trains moving along the great stretches of track under Centralized Traffic Control, go more swiftly and surely.

Whenever you ship or travel on Union Pacific, you have the benefits of 2,095 miles of CTC. Trains move more efficiently. Goods arrive more dependably. Your travel is easier, smoother, more relaxing.

Whenever you ship or travel...
be specific—
say **UNION PACIFIC**
Railroad
OMAHA 2, NEBRASKA

UNION PACIFIC RAILROAD

more expensive than they should be mean that freight rates are also higher than they should be—especially for 'captive' commodities that can't take full advantage of competitive modes of transportation."

And shippers are worried that because of these practices, the carriers may not be able to provide the fully efficient, modern transportation the marketing-oriented economy of the 1960's needs.

"Out-moded work rules have not only delayed but also negated many technological advances made in carrier operations," according to E. F. Lodge, Jr., director of traffic for the Atlas Powder Company. "Such practices, if continued, will destroy our national system of railroads. They cannot be justified either morally or economically."

These outmoded work rules are the causes of "featherbedding"—unneeded workmen, unnecessary or duplicating jobs, work performed in such a way that it is stretched out to cover an arbitrary period of time.

Featherbedding is not new to industry, and it is not new to transportation. It comes about every time a union successfully maintains old work practices in the face of technological improvements. As automation moves into the factory, it becomes a major problem facing all industry.

Bone of contention

Changing old work practices was one of the major issues, left relatively unsettled, in the nation's longest steel strike. It was the core of contention in the longshoremen's bargaining and strikes last year. It was the reason for the jurisdictional dispute between the International Engineers and the Airline Pilots' Association over the manning of jets. It is going to be a real issue in trucking negotiations with the Teamsters this year. And featherbedding has been made a major public issue by the railroads.

The railroads' public campaign against featherbedding began more than a year ago, as the rails saw freight traffic slipping away, costs up and profits down, and the approaching end of a three-year moratorium on changes in work practices.

For 50 years, from 1860 to 1910, railroads expanded throughout the United States. But the end of rail expansion did not mean the end of the increase in freight. In 1890, the rails carried more than 75 billion ton-miles. By 1929, this was up to 450 billion. The depression had its effect, but World War II carried the rails to new highs. In 1944, they carried more than 740 billion ton-miles of freight. That was almost 70 per cent of the nation's freight, plus 74 per cent of the country's passenger miles. Trucks carted less than 6 per cent of the freight, and oil pipe lines just 12 per cent. But a new shaping of transportation was on the way.

By 1958, railroads were handling only 562 billion ton-miles of freight. That was less than half of the nation's freight. Trucks were hauling more than 20 per cent, and oil pipelines were handling nearly as much. And by that time, too, competing carriers accounted for more than two-thirds of the passenger miles.

The railroads were hurting. Net income in 1958 was less than $602 million, down from a 1955 high of

RADIO: *An engineer gets an okay from the caboose.*

RETARDER: *Switches control cars in the yard.*

DISPATCHER: *Panel indicates train movements.*

Progress on the Rails

While they are deep in the featherbedding fight, railroads also are looking to all kinds of technological advances and innovations to improve operations, cut costs, and get greater efficiency. These include:

- Crewless, radio-controlled switch engines, now in the experimental stage. U.S. rails aren't alone in the development of crewless engines. The Soviets have already operated an electric train on an inter-urban run with a digital computer in the driver's seat that takes into account weather and track condition changes and operates the train at various speeds.

- Automatic, retarder-type classification yards are booming. Plans for 1960 construction of such yards have been announced by the MoPac, the New York Central, and the Erie and DL&W.

- Diesel-hydraulic engines, already in freight and passenger service in Europe, will be running on American rails this year. Two Western roads placed limited orders for some last year.

- General Electric and Alco have built big new 2,400-horsepower, four-axle, diesel-electric freight locomotives.

- More and more cars equipped with roller bearings are being bought. Experts expect the emphasis in freight car investment this year to be on special equipment—piggyback cars, cars with wide doors, mechanical refrigerator cars, and so on.

- Centralized traffic control was installed on more than 2,000 miles of track in 1959. More is scheduled for installation in 1960.

- Freight car loadings are expected to increase, with piggyback loading continuing its rapid growth—it jumped 50 per cent last year over 1958, and is expected to do it again in 1960.

- And if rail management can prevent the unions from requiring more crewmen, radio communication will come into even wider use on trains, switch engines, and for intra-train orders and information. U.S. rails have installed more than 35,000 radios in maintenance-of-way equipment, yard offices, cabooses, and locomotives.

$927 million, and it dropped again to an estimated $574 million last year.

Why?

Featherbedding, the railroads found, was one major cause of their problems. Besides cutting service to shippers, the Association of American Railroads says, "make-work" rules siphon off about 5 per cent of railroad revenues and add at least 10 per cent to the rails' total payroll of $5 billion a year.

Over the last decade, American rails have paid just half as much for featherbedding each year as they have been able to invest in plant and capital improvements.

Daniel P. Loomis, president of the Association, fired the first big gun of the battle against featherbedding in a speech to the National Association of Shippers' Advisory Boards at St. Louis, Mo. He said that "wasteful and burdensome work rules—commonly known as featherbedding—hang like an economic albatross around the neck of American progress.

Relics of the past

"Rooted in the horse-and-buggy era of 40 or more years ago, the work rules have remained fixed and inflexible while the railroad industry made enormous strides in technical improvement. These outmoded rules now constitute an immediate drain on the industry in excess of $500 million annually and—equally important—act as a deterrent to further progress, as a job depressant and a barrier to advancement for the men and women now employed in our industry. And they put pressure on our rate structure, bidding up prices to all consumers."

In the argument that has raged since then, the Association has noted that besides keeping freight rates up, outmoded work rules contribute to inflation and high living costs, undercut the rails' competitive position, weaken the basic defense structure of the nation, and freeze out new equity capital because the rails can—on the average—give only a 3 per cent return on capital investment.

Today almost all railroads operate their passenger services at a deficit, and the freight shipper is left as the man who indirectly picks up a major portion of the featherbedded bill.

The rails' battle is directed at work rules governing the men who actually operate trains. Management feels it could get along with about 150,000 of these operating employees—instead of the present 200,000—out of a total work force of some 800,000. The "non-ops" generally have accepted mechanization, automation, and fewer jobs—provided the displaced and transferred workers were compensated.

In the fight, management is attacking on three fronts:

It wants to eliminate unnecessary jobs, change the old mileage requirement for a day's work, and modify the present rules and geographical divisions that limit work areas.

- *Unnecessary jobs cost the railroads a total of about $280 million a year.*

Most of this pay goes to some 35,000 firemen on freight trains on the road and in yard service. They got their jobs written into contracts in 1937, well before the diesel engine replaced the steam locomotive. But in the words of railroad management, the fireman now tends no fires. His lookout, emergency, and other functions all can be performed by the head-end brakeman, who also rides in the cab of the freight road engine.

The proposal to eliminate firemen is nothing revolutionary, and they would continue to serve in passenger diesel service. For some twelve years before 1937, diesel-powered locomotives ran without them. Railroads have operated electric and self-propelled motor cars for millions of miles without firemen, and in other countries many locomotives other than steam are always run without firemen.

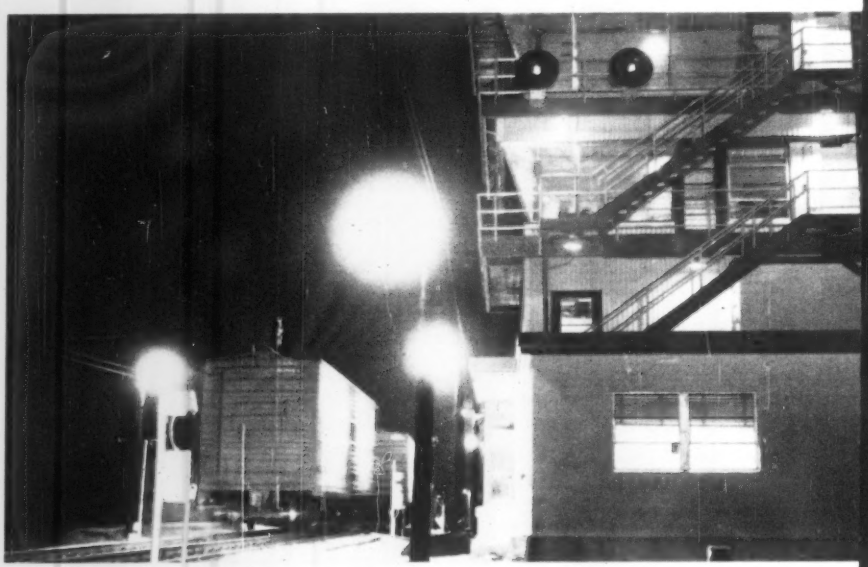
The railroads also want the right to get rid of brakemen who tend no brakes and unnecessary assistant conductors, ticket collectors, baggagemen and flagmen now required.

The brakeman waves the flag

Brakemen, for instance, were once essential. They raced back and forth across the tops of the cars, setting and releasing hand brakes. But under the Federal Safety Appliance Act and the regulations of the Interstate Commerce Commission, cars must be equipped with air brakes. The brakeman no longer sets or releases brakes. He watches equipment or flags at crossings—or he sits.

It is not unions alone that tell management what jobs must be done by how many men. In seven states regulatory bodies have the authority to set up crew-consist regulations, although only one—Connecticut—actually has used this authority. And 23 states have crew-consist laws. In sixteen of them, the laws spell out just how many brakemen and other crew members must be carried on trains under a variety of conditions.

Almost all of these laws, engen-



OVER THE HUMP: *A boxcar starts down the grade at the N.Y. Central's Robert R. Young electronic classification yard at Elkhart, Ind. Such yards, run by button-pushing operators in control towers, are being built by railroads all over the United States.*

dered by the Brotherhoods, were passed by state legislatures in the name of safety. They may require a third brakeman on a train of specific length, or a flagman at all crossings, or other specific crewmen.

Less costly but more dramatic are the make-work jobs on rolling maintenance-of-way equipment. Many of them were all but created by dictate of the National Railroad Adjustment Board, the group which decides work-rule disputes when they go into binding arbitration. Under its interpretations and applications of the work rules, management cannot decide what men are needed on modern way equipment. If the allocated fireman, engineer, or other crewman is not used, the road still must pay his salary—for not working.

● *The present outmoded "day's pay" mileage scale costs railroads an estimated $150 million a year.*

Since 1919, operating railroad men have been paid on the basis of mileage and hours, whichever is more.

In freight service, the pay unit—always known as a "day's pay"—is based on a 100-mile run. If the run takes more than eight hours, the crew must be paid at an overtime rate. In through passenger service, the rate is based on 150 miles or seven-and-a-half hours for conductors and trainmen, and 100 miles or five hours for engineers and firemen.

These standards made sense in 1919, when a freight train ran at about twelve-and-a-half miles an hour, covering 100 miles in an eight-hour day. If the crew pushed it along, the men were finished sooner, and railroad and crew both benefited.

Today, when freight trains average twice this speed, many railroad operating employees earn a basic "day's pay" in as little as two hours.

With the 100-to-150-mile pay unit, railroads must hire more men than they actually need in a working day—and they pay a penalty for every mile-per-hour they add to average train speeds. Management wants to up the standard from 100 miles to 160 miles for a full day's pay in passenger and through freight locomotive work.

● *Railroads pay $120 million in excess wages because they can't use yard men in road service for more than a few feet, can't use road men in the yards, and can't ask crews to operate outside their 100-mile geographical divisions.*

By decision of the Adjustment

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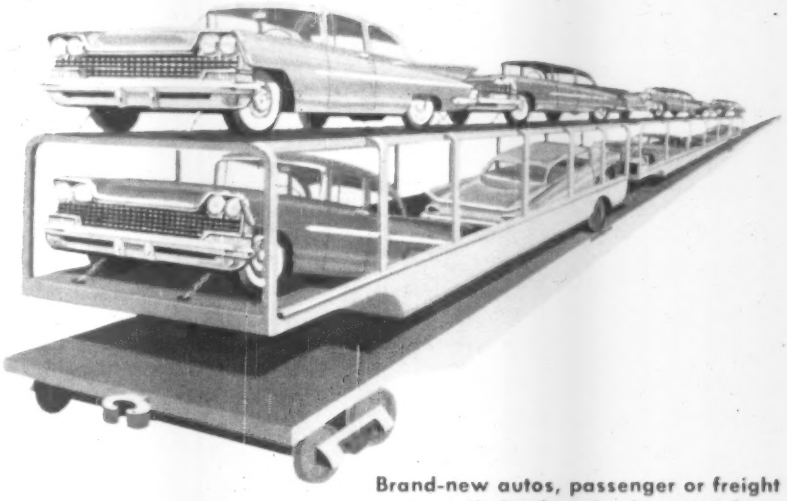

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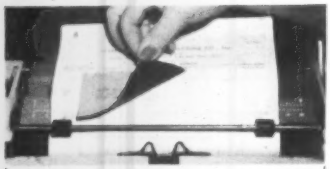

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TRANSPORTATION DILEMMA

Board, yard and road operating men are now separated by strict jurisdictional walls. These, in the words of the Association, add "millions of dollars to the cost of railroad service."

In order to keep up with changing requirements and conditions, management wants to be able to change, adjust, or adapt yard-road working operations in any way and at any time. And it is asking for a change in the old geographical divisions that are marked off by crew terminals. Many of these were set up years ago for servicing steam locomotives, refueling, and watering. Many are about 100 miles apart, and hundreds of trains today must change crews at the end of a division or pay a penalty.

The glare of publicity

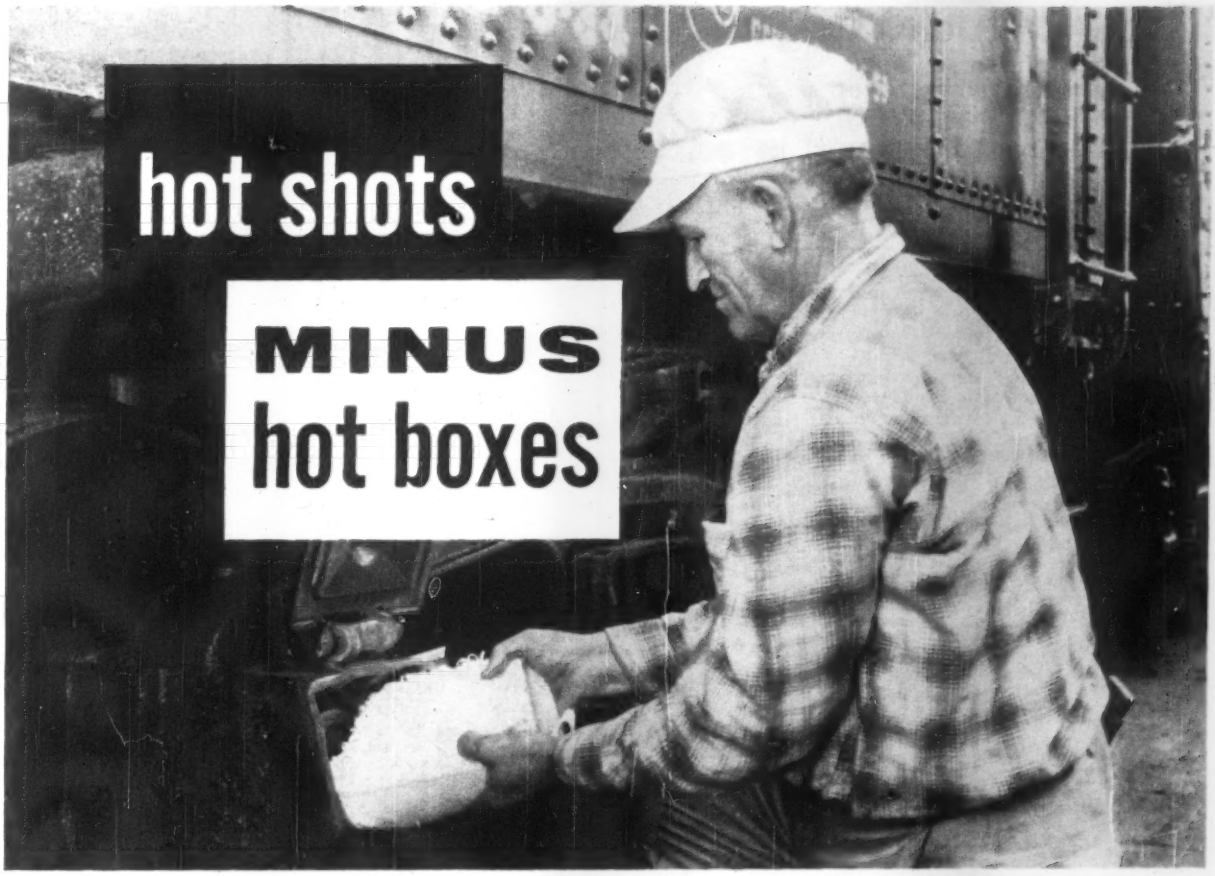
There may be some question about the railroads' wisdom in waging a public campaign against featherbedding. A number of traffic managers and industrial relations experts have pointed to the danger that such a campaign will solidify resistance. Roy, traffic director of Pennsylvania Glass Sand, although warning of the dangers inherent in continuing present work practices, has also declared that railroad management just hasn't done a good job of selling its employees on the need for work rule changes.

Yet there can be little question that the entire wage structure of the railroads needs to be overhauled. The need has long been recognized—but never fulfilled.

In 1936, a study was made of rules governing wage payments to road men. Nothing substantial came of it. In 1955, an Emergency Board recommended a comprehensive review of the entire structure in a report on a dispute involving the Order of Railway Conductors and Brakemen.

In the most recent featherbedding fight railroad management called for such a review immediately. But observers testifying before the Joint Economic Committee last September insisted such a study should wait until negotiations cleared the air. This also was what the 1955 Emergency Board recommended.

Although the Engineers Brotherhood and management agreed to sub-



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TRANSPORTATION DILEMMA

mit the latest wage dispute to binding arbitration in April, the more heated question of work rules has been left dangling.

For the sake of the shipper and the country, it has to be settled.

The 1955 Emergency Board report said, "There is imperative need in this industry, and specifically in the operating classification, for a thoroughgoing review and modernization of the internal wage structure.

"The task will challenge the leadership on both sides, and the capacity of the labor organizations to work together will be tested. Other industries with less experience in collective bargaining have met and solved these problems. There is every reason to believe that this industry can do as well . . . comprehensive consideration of the *whole* wage structure is required."

Rail management has determined to get just that.

Truckers' Soft-Pedal Fight

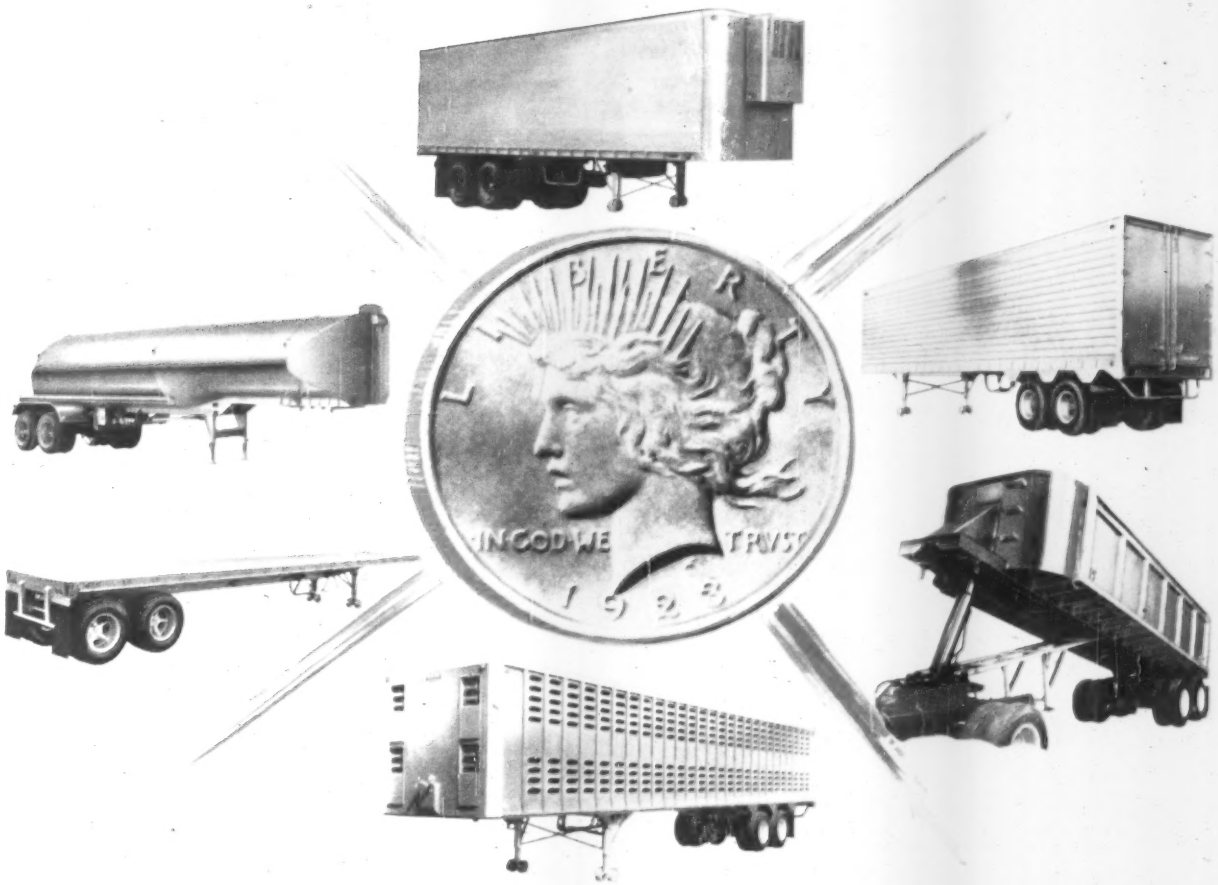
Truckers, too, have had to battle featherbedding, with perhaps more success so far than the rails. They have generally stayed clear of publicizing their featherbedding problems, and have concentrated instead on fighting at the bargaining table.

With contracts expiring this year, truckers are going to have to fight featherbedding as seldom before. Wages, cost-of-living increases, and make-work practices all have forced truck rates up steadily over the last ten years. Besides that, truckers are well aware that a major reason for the railroads' featherbedding fight is to wage a harder competitive battle with the trucks.

In the early days, over-the-road trucking was influenced by railroad practices, and some of the old Eastern seaboard truckers adopted incentive pay systems similar to the railroads'.

The formulae included time and distance, and were modified, particularly in New England, so that a complicated "trip rate" provides about an hour's pay for each 20 miles—a pay scale in some ways as outmoded as the railroads' 100-mile unit.

The burgeoning Central, Southern



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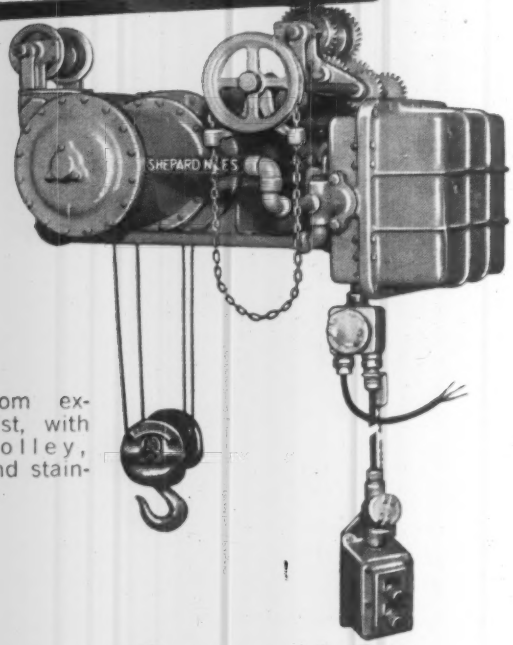

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TRANSPORTATION DILEMMA

and Western haulers developed their own type of incentive pay based on mileage. But the mileage pay basis includes a minimum guarantee for trips of a certain distance, and that guarantee covers only miles driven. The driver who spends time switching trailers or making short extra runs to deliver and pick up a trailer must be paid extra, despite the fact that he completes the whole job in less than eight hours.

Work rules also have made it difficult for truckers to use piggybacking when it seemed more efficient. In the Central States, the contract and a number of clarifying cases, have limited piggyback to overflow freight. No trailers can be sent over the roads if there are any drivers without scheduled trips.

That this is an infringement of management's right to manage was pointed out last year in a binding arbitration case under the Eleven Western States Over-the-Road Agreement. The Teamsters disputed the right of Consolidated Freightways to send its trailers on flatcars if it meant eliminating certain runs. But the arbitrator ruled that unless management had waived that right, it could send freight any way it wished.

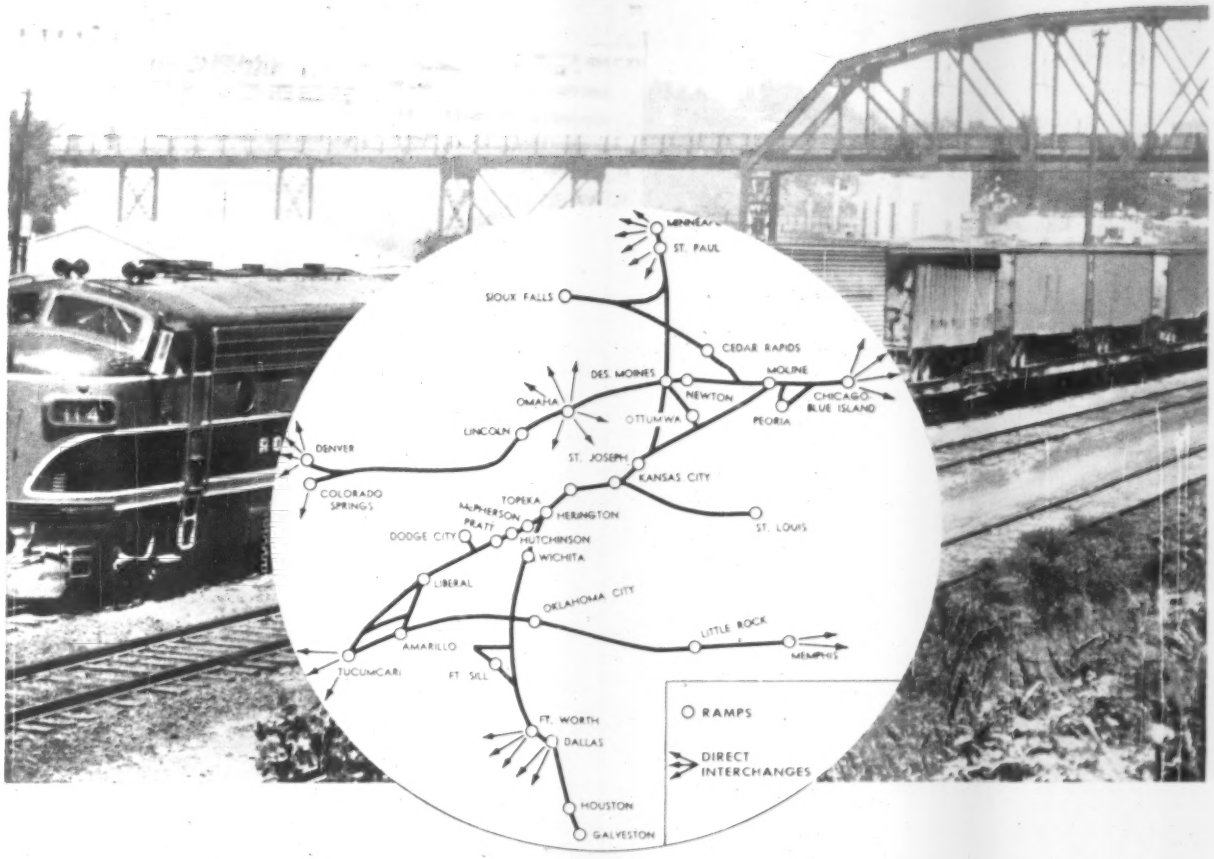
Truckers also are plagued with featherbedding in terminal operations. Rigid rules set up work classifications in terminals, and any man who works in a higher classification gets a day's pay in that classification.

Taking the offensive

The industry as a whole began a positive attack on outmoded work practices in 1952, when the American Trucking Associations' Industrial Relations Committee studied bargaining problems in the industry.

The study group was led by Benjamin R. Miller, director of the ATA Industrial Relations Department. He says that "management must share part of the blame for featherbed practices in multi-employer labor agreements—largely because it is too often insufficiently prepared for collective bargaining."

Since the study, trucking management has gone into bargaining solidified on an area-wide basis, and de-



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TRANSPORTATION DILEMMA

termined to get results. And there has usually been a minimum of publicity.

Miller points out this kind of bargaining has permitted more interchanging of men and gradual elimination of some featherbedding.

Dockside Featherbedding

Outmoded work rules are a major management problem in loading and unloading ships in every major port in America.

Management can't shift men from the dock to the ship, but must use crews of a certain size for one kind of freight in one port, and a crew much larger or smaller for the same freight in another. Work limitations require baggagemen to handle only baggage and a "location" man to do nothing but locate cargo on the dock. Regulations specify the size of various work crews, regardless of management's conviction that a smaller group—such as the rigging crews required in the Port of New York—could do the job just as efficiently.

Many of these practices got embedded in contracts when negotiating unions started whipsawing—playing one company off against another. And although internecine warfare among the maritime unions has been in abeyance for the past couple of years, back in the days when they were fighting each other for the workers' loyalty, each union was determined to hold on to every work rule it had.

But there has been some recent progress in water transportation labor practices. This is particularly true of the problem of handling containerized cargo—although featherbedding has done a lot to hold up containerization, as well as unitization and palletization in this field. After strikes and negotiations, the West Coast Longshoremen's Union and the Pacific Maritime Association agreed on the use of containers. The steamship lines put up $1.5 million to cushion expected displacement. On the East and Gulf Coasts, shippers agreed to set up a special fund and pay royalties for all containers. But no agreement on the amount of royalty could be reached, and the matter went into binding arbitration in April of this year.

For many years, the American merchant marine has been a U.S. Government-subsidized business. Experts believe it could compete with foreign carriers—despite the differences in wage and working conditions—if American shipowners could take advantage of the newest advances in design and engineering.

Labor relations men in the field have pointed out that with less whipsawing and less inter-union fighting, the time may now be ripe for all segments of the maritime industry to meet, review common problems, and seek new efficiency in an industry that sorely needs it.

Confusion in the Air

Airline labor relations come under the Railway Labor Act. Until several of the various craft unions set up a coordinating committee last year, each one fought its contract battles on its own. The lines are subject to considerable whipsawing and they, too, have been trying to put together an

Because Union Electric goes more places, sees more people,

industry-wide team. But so far they haven't succeeded, there is no common spokesman as there is in other transportation industries, and what management as a whole thinks of featherbedding is as unclear as a rained-in field.

New jets, new work rules

The recent major work practices dispute was a jurisdictional argument between the International Engineers and the Airline Pilots' Association over how men were needed in the cockpit of the new jets. The Airline Pilots and Engineers agreed that only a three-man crew is necessary, but they disagreed on whether the third man should have pilot training. And after separate negotiations, some airlines wound up agreeing to crews of four, others to crews of three.

Professor William Gomberg of the Wharton School of Finance and Commerce delved into the whole problem of labor relations and work practices in transportation in a project for the recent U.S. Department of Commerce Transportation Study. After interviews with union heads and management groups, plus extensive research on the whole problem, Gomberg pointed out that today's transportation featherbedding controversies are at bottom an argument over the degree of a worker's right to his job as against management's right to define the job.

But he warned that whoever tries to eliminate inefficiency must realize that timing is of major importance. Eliminating work rules is not just a question of an engineer's criterion of efficiency. It is also a "task in social reconstruction."

In his report to the Department of Commerce, Gomberg summed up the featherbedding situation in transportation and made a few specific recommendations. He reported:

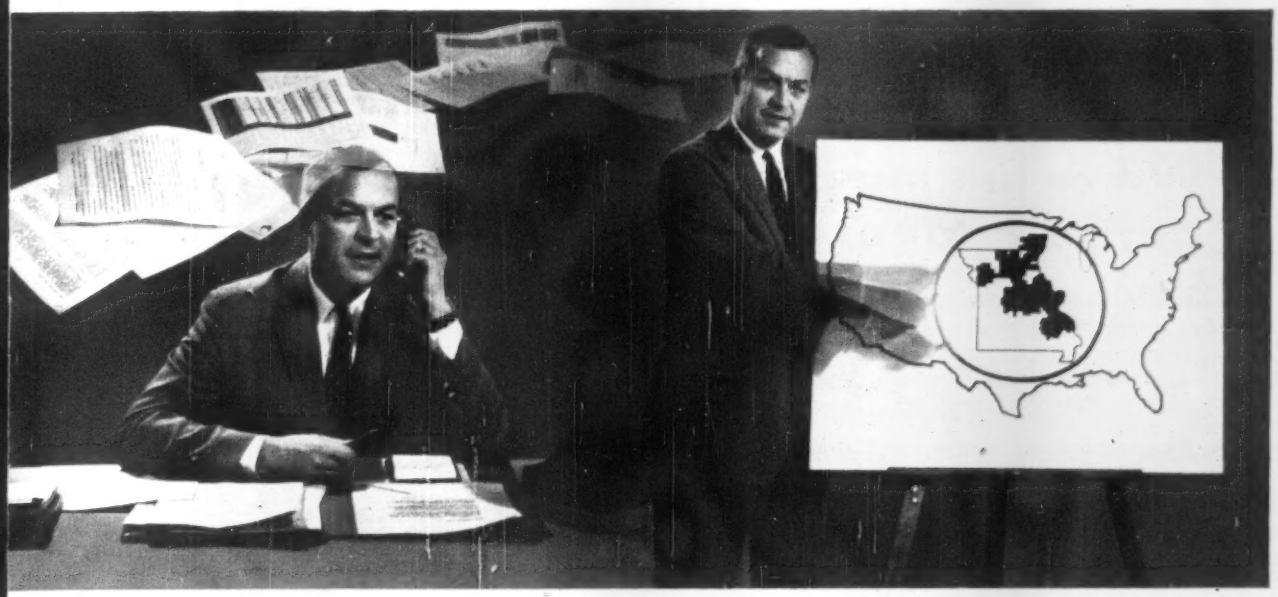
- It is unlikely that present negotiations will solve all the railroad work rules problems that have accumulated over the years. After current negotiations, the National Mediation Board should get the rails and unions to set up a "long-term commission to look into the entire problem of the rules and wage structure of the railway industry."
- The trucking industry and trucking unions appear to be well on the way to an adequate method of handling work rules problems.
- In the maritime industry, new job definitions and new manning schedules are vitally important. The Government might use its good offices to encourage a conference between dock and seagoing unions and management to review means to encourage technological innovations.
- Airline management is taking its first steps toward coordinating collective bargaining strategy. Recommendations here would be premature.

The shipper's role

That is the view of an independent observer who is not directly billed for outmoded work practices in transportation.

Shippers and management, who already pay the price for featherbedding, look to the immediate years ahead with the knowledge that if industry booms—or even just grows enough to keep up with the population increase—it will need the most modern "seven-league boots" it can get to carry its freight.

For hundreds of years, every surge of the economy has ridden on ad-



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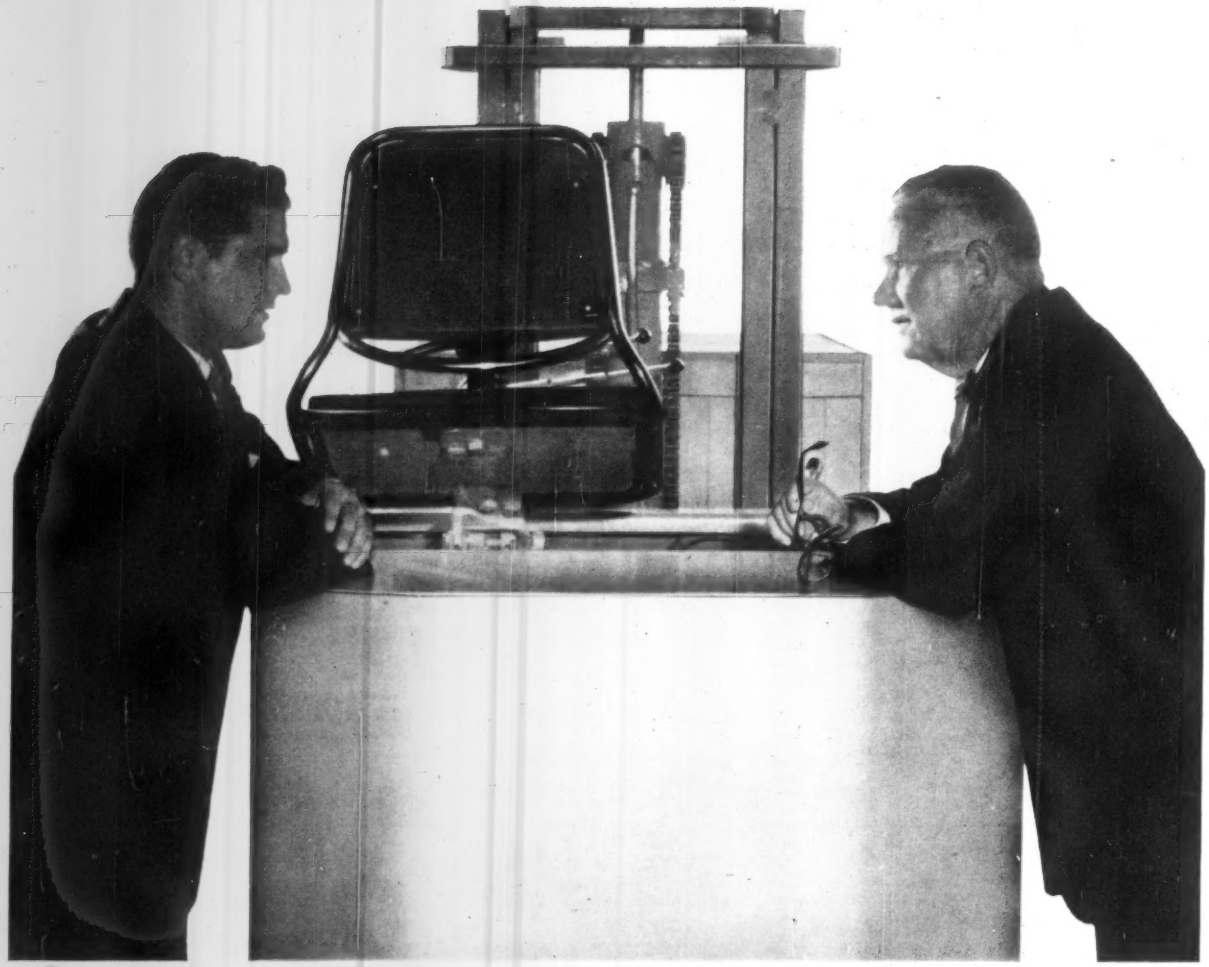

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vances in transportation, from canal barges to Mississippi flatboats to steamboats to the railroads, the trucks, and the planes.

If industry is going to meet the marketing challenge of the future, it must have the most efficient transportation possible.

In the fight to get it, there are many things that shipping management can do to help the carriers.

It was while speaking to the National Association of Shippers' Advisory Boards that Loomis launched the railroads' battle against featherbedding. It is through the Advisory Boards that shippers can help back up the carriers.

How? By finding out ways to eliminate the opportunities for featherbedding—and above all by giving public support, as many shippers have, to the carriers' battle, turning the spotlight on the problems featherbedding causes not only the transportation companies but industry as a whole.

—J.R.M.

Alert traffic management in industry is coming up with varied ways to reduce the third largest cost of doing business. From here to page 149, you'll find case stories of new approaches that are adding to company profits.

TRANSPORTATION DILEMMA

IMC Traffic Manager Helps Boost Sales

By offering the services of its experienced traffic department to its customers, this company creates good will.

TO anyone familiar with the transportation equipment industry, there is nothing startling about traffic managers aiding the sales department. They've been doing it for years by throwing business to one common carrier or another, paving the way for their colleagues in the sales department who later come around to push trucks or railroad equipment or tires.

Now a chemicals producer, too, has enlisted the aid of its traffic department in boosting sales by generating good will. Since the beginning of the year, International Minerals & Chemical Corp., Skokie, Ill., has been offering the services of its experienced traffic department to the many small manufacturers it supplies. And the department is set up to advise not only on IMC deliveries but on expediting the customers' own shipments—and orders from other suppliers as well.

There's plenty of room for action, because the transportation costs of its customers' "tonnage" fertilizer products are high, comparable to those of IMC's heavy agricultural chemicals, which average about one-third of the total price the customer pays.

Since many of the smaller customers do not have full-time traffic managers, they particularly appreciate

CRASH PROGRAM: *To set up IMC's new transportation service to customers, director of transportation Eugene Landis (center) and his staff put in many weekends and evenings of overtime. Landis now plans to add two men to the traffic department to handle the increased load. Customers seem to be highly pleased with the new program.*

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West Virginia is the place to grow . . . here are found exceptional advantages for plant location. Quick access to markets . . . within a 500 mile radius of West Virginia more than half the nation's population lives, and more than half the nation's income is earned. West Virginia is a treasure house of natural resources . . . coal, natural gas, oil, rock salt, brines, an ample water supply. A versatile labor supply, equitable taxes, and cooperative communities round out the West Virginia picture. Whatever you need, it's likely you'll find more quality and quantity in West Virginia. Investigate!

For information write: Don Crislip, Executive Director, West Virginia Industrial and Publicity Commission, State Capitol Building, Room D3 Charleston 5, West Virginia

the businessman's State . . . .
WEST VIRGINIA

WHY PAY THROUGH THE NOSE IN AN ANTIQUE SHOP?

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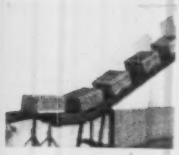

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BE WISE BUY SAGE

TRANSPORTATION DILEMMA

help with their outgoing traffic. The company offers them advice—and action—in the following areas:

- *Routing and freight rates:* IMC recommends the fastest and most economical route to get the order to the customer, and helps him with up-to-date information on rates, quantity shipments, and freight equalization.
- *Car supply and barging:* The company helps obtain tank cars, hoppers, and barges in times of tight supply.
- *Tariff interpretation and freight claims:* IMC traffic representatives are graduates of fully accredited transportation schools, with years of experience in studying traffic quirks. All are qualified to assist customers in claim negotiations because they are licensed to practice before the Interstate Commerce Commission.
- *Transit arrangements:* The traffic staff shows manufacturers how to save on transportation costs by arranging for stops in transit for processing.

(continued on page 131)

How IMC Helps Its Customers

Case A

A phosphate rock customer in central Illinois was having trouble with deliveries. The railroad sent shipments out to him from a division point 30 miles south of his plant—on the surface of it a sensible procedure, since the next division point is 60 miles to the north of his location. But northbound local service on the line runs only on Mondays, Wednesdays, and Fridays. With every-other-day deliveries, the customer ran into production difficulties. Demurrage charges and overtime for the unloading crew became standard. The IMC traffic department found that additional shipments on the southbound trains running Tuesdays, Thursdays, and Saturdays would save the customer money—even though they had to come from the other terminal, twice as far away. The railroad now moves his shipments from both division points, and the customer has daily deliveries without demurrage and overtime.

Case B

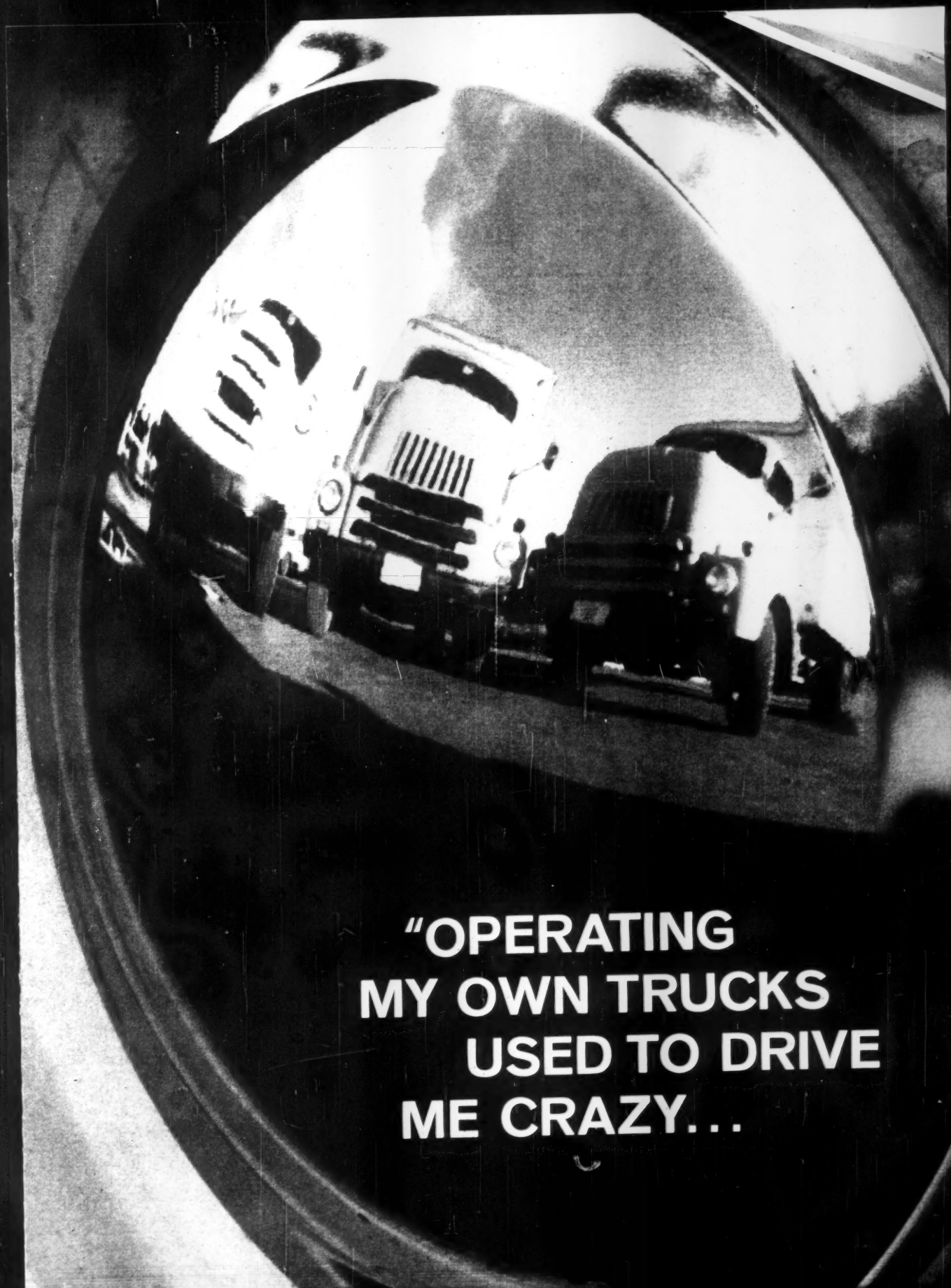
IMC knew that one Pennsylvania customer had been contemplating building a new plant. It was rather surprised to learn that he had dropped the idea completely because of increased transportation costs. Upon inquiry, IMC traffic advisers discovered that the customer had been given the erroneous impression that if he moved, a local freight rate of $5 would be added to the $8.10 rate he was already paying for phosphate rock deliveries. The traffic men looked up the rates, discovered that the new plant was in the $8.10 rate territory, with no local freight charges applicable. Result: the customer is again thinking about building the plant he wants and needs.

Case C

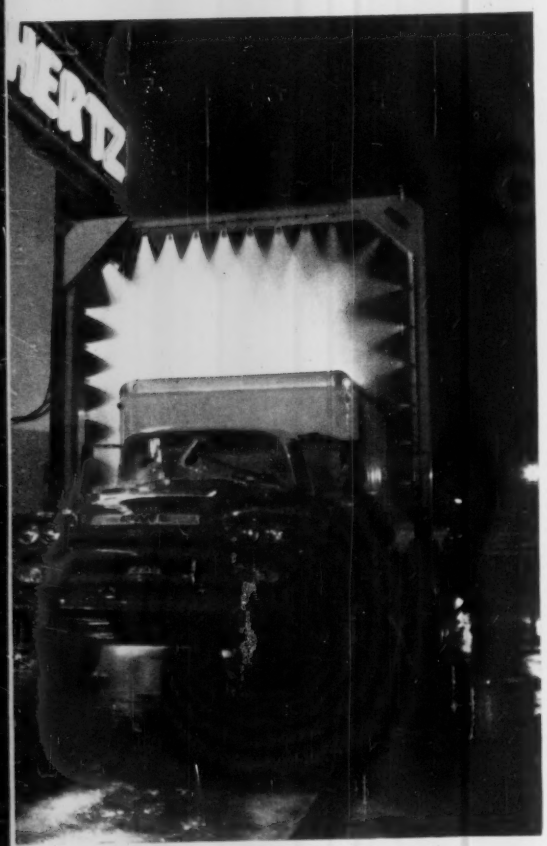
One IMC customer in Georgia buys other fertilizer material from a supplier in Alabama. For a long time he was unhappy with the railroad, since he knew the rate for a hopper-carful of material—and could see with his own eyes that the cars arriving at his plant were full to the brim. Yet the charges he was paying were beyond the rate schedule. IMC experts who got on to his problem discovered that the low rate their customer wanted applied only to larger hopper cars loaded to 100,000 pounds. But they also discovered that the railroad could easily furnish the Alabama supplier with larger cars to handle 100,000 pounds, and that he, in turn, was more than willing to use them.

Case D

A Canadian customer was dissatisfied with the rate on IMC chemical shipments from Florida. Initially, the railroad offered a combination rate over the international border point. But in discussions with the customer the traffic department learned that his plant is closer to Florida than is Montreal, which gets a single "through" rate. Application of the Montreal rate would result in a much lower freight charge. The railroad, after thorough investigation, agreed to protect this lower rate—and to refund several thousand dollars paid for previous shipments.


"OPERATING
MY OWN TRUCKS
USED TO DRIVE
ME CRAZY...

Hertz "custom engineers" each truck to meet the individual requirements of your operation.



Hertz washes and cleans each truck regularly.

Hertz paints and letters each truck to your exact specifications.

Hertz handles all paperwork, even furnishes state license plates.

. . . and then Hertz got me out of the truck business . . . back into my own business"

"Before I switched to Hertz Truck Lease Service I used to spend as much time with my truck fleet as I did with the business. There were forms to fill out, reams of accounting work, parts, repairs—it was like running a second business!

"But look what happened when the Hertz people took over. I turned all problems of ownership over to Hertz when I signed the contract. They bought my trucks at their fair market price. Trucks that warranted it were rebuilt from bumper to bumper. For the units that had to be replaced, I had a choice of new GMC, Chevrolet or other sturdy trucks.

"Along with this, Hertz 'custom-engineered' the trucks to my operation. They analyzed what we hauled, where we delivered, size of our loads—and because of this, we're able to get even greater efficiency and usefulness from our trucks.

"Hertz painted and lettered each truck using our standard colors and identification. And one thing we never had time for—washing and cleaning—is done at night or during weekends.

"Maintenance has always been a big headache. With us, it was catch as catch can. Now Hertz crews work on our trucks on a regular preventive maintenance schedule. The work is done during off-duty hours. Furthermore, I'm out of the parts business since Hertz furnishes everything!

"In case an accident puts one of our trucks out of working commission, Hertz provides for a replacement at no extra charge."

But Hertz Services don't end here . . .

Hertz performs all repairs and maintenance.

Hertz replaces trucks in case of accidents.

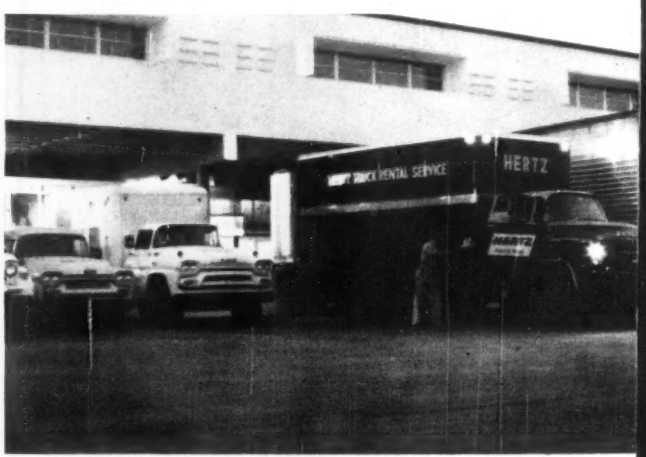
Hertz offers customized long-haul tractors and trailers.

"...thanks to Hertz, all our truck problems have been solved"

"Hertz has turned a constant headache into a smooth, streamlined business operation. They have helped expand our service to distant points with a long-haul tractor and trailer. And it's reassuring to know Hertz protects us with more than 500 truck stations all over the country.

"For our peak periods Hertz provides extra trucks. This gives us maximum efficiency and customer service without having to increase the size of our permanent fleet.

"The switch to Hertz has been a dramatic step-ahead for our company. We have no capital invested in our fleet. All of the accounting work is done by Hertz. Our people who operated the fleet are now concentrating on more profitable work for the company. And one budgetable check per week covers everything. That's all there is to it, and we're out of the truck business for good!"



Hertz provides extra trucks for peak periods.

Note from Hertz—There is no one man who has said all these things in exactly this way. What you have just read are the combined expressions of business men, like yourself, who have come to know the many benefits of Hertz Truck Leasing. They could be *your* words.

HERTZ TRUCK LEASE®

How about you? Call your local Hertz Truck Lease office for more information. Or write for the booklet, "How to Get Out of the Truck Business," to Hertz Truck Lease, Dept. B-6, 218 South Wabash Ave., Chicago 4, Illinois.

(Continued from page 126)

● *Negotiation with carriers and technical assistance:* IMC men will explain the regulations and the routines of transportation companies, clarify carrier terminology and responsibility, and help in negotiations for spur tracks. And they do not confine their work to transportation problems, but also help customers acquire land for plant sites or docks and make plant location and warehousing studies.

To inaugurate the new program, which is only one of over half a dozen free management and technical services that IMC offers to its customers, regular salesmen were briefed first. They then took the traffic men out with them on their rounds, after a direct-mail brochure had been sent alerting customers. The two-man teams explained the new project, analyzed problems, and ran off a twelve-minute slide film on transportation.

The traffic department also started a monthly "Transportation News," specifically oriented to IMC's customers in agricultural chemicals.

Reaction to the new service has been excellent, according to Eugene Landis, director of transportation, and the traffic staff has already helped solve some thorny transportation problems for customers (see case histories on page 126).

Two more men will have to be added to the department to handle the increased load of work, but beyond their salaries and travel expenses, the cost of the program is difficult to estimate. It is still too early to tell how much additional business the service has generated. Top management, however, is confident that it will more than pay off on the investment. And there is another gage of its value: IMC's competition is copying its innovation. —M.M.

TRANSPORTATION DILEMMA

Getting a Leg Up on LTL

Striving to solve its own less-than-trailerload shipping problem, one company came up with a system it now sells profitably to others.

COSTLY transportation headaches can sometimes be eliminated with a little ingenuity. And if the solution is particularly effective, you might end up with a profitable sideline in special equipment. Proof of this point can be found in the story of an Alabama-based hardware distributor who has gone into the business of making simple but highly effective containerization equipment. It all started as a "do-it-yourself" project to solve the company's own LTL headache.

Night drop-off problem

Five years ago, the management of the Moore-Handley Hardware Company was fretting over a costly nuisance. Every night the company had to drop off about half a trailerload of goods at a branch in Decatur, Ala., about half way between its major operation points in Birmingham and Nashville, Tenn. The stock was carried in a trailer that ran the 200 miles every night between the two big offices. Because of the way the warehouse was scheduled at Birmingham, the rig never got to Decatur before midnight. As a result, either the branch manager or some other person had to meet the trailer to unload half of it before it finished its run to Nashville.

Management began to explore various containerization systems that would enable the driver to drop half a load by himself, eliminating a lot of strain on personnel as well as overtime at the Decatur branch.

Working with W. T. Stringfellow and Company of Nashville, Moore-Handley developed the Morhaul system of retractable leg kits and hydraulic lift kits.

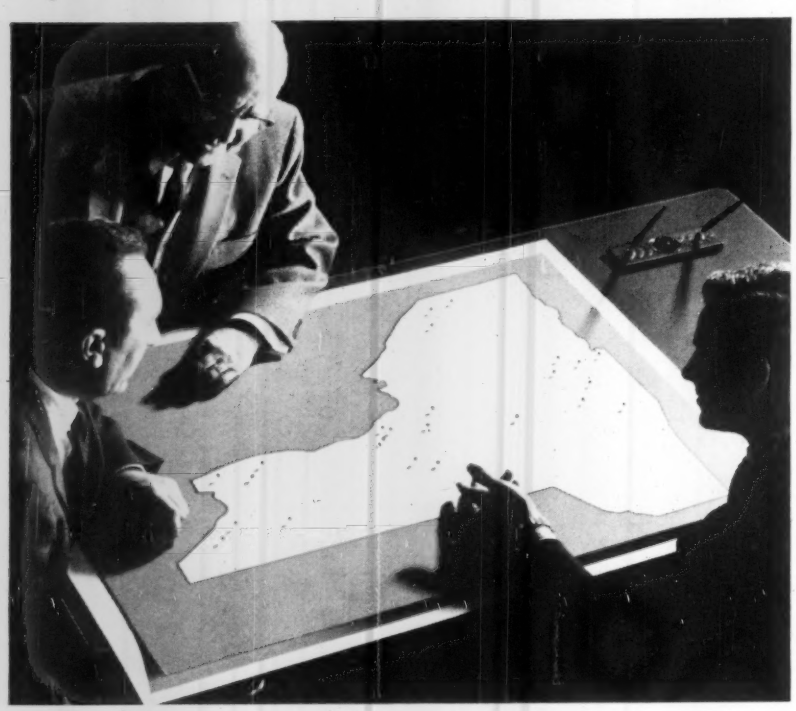
In this system, the retractable legs are permanently attached near the four corners of truck bodies or shipping containers. When the legs are lowered, the body or container is a good distance off the ground. A flat-bed trailer or truck is then backed under the container between the legs.

One man can operate the lift that elevates, then drops the container on to the bed. When the truck delivers a container, the process is reversed. Two or more containers can be mounted on the same flat-bed truck or trailer.

Using its own containerization system, Moore-Handley found that it could actually eliminate its small branch warehouses, starting with the one at Decatur. Trailers leave Birmingham with the containers, dropping them off where needed at convenient gas stations. At the gas stations, route men driving smaller trucks equipped with lifts pick up the containers and make local deliveries. The system works so well that Moore-Handley has used it to penetrate new marketing areas. Yet the profitable added business is handled without tying up any more capital in inventory at central warehouses, and local distribution costs have been cut as much as 25 per cent.

Not only does Moore-Handley save

your profit potential is great... UPSTATE



Plenty of plant sites with husky profit potential are waiting for you in **UPSTATE, N.Y.**

Here, in the 22,000 square miles served by Niagara Mohawk, nearly every type of industry can find the plant site admirably suited to its needs...the site from which to serve the richest market in the world...the great Northeast.

We can help in your search for a profitable site with fast, expert, confidential assistance. You can benefit from our comprehensive inventory of buildings and sites and the intimate, detailed knowledge of our district managers about the communities we serve. We'll gladly assist in specific research you need in *your* search for the ideal location.

Before you choose a plant site, learn all the advantages waiting for you in Upstate, N.Y.: a wealth of natural resources . . . plenty of low-cost electric power . . . abundant water . . . a solid labor force . . . a most attractive political and economic climate . . . healthy, diversified industrial neighbors prospering here. Transportation is particularly attractive; the growing network of superhighways, the St. Lawrence Seaway, the Barge Canal and excellent rail and air service combine to provide fast, dependable access to the rich northeastern market and Canada and to the seaports of the world.

For complete information on the services we offer...and for concrete help in your search...write, wire or phone Director of Area Development, Niagara Mohawk Power Corporation, Dept. D-4, 300 Erie Blvd. West, Syracuse 2, N.Y.

NIAGARA MOHAWK

BUSINESS MANAGED • TAXPAYING

TRANSPORTATION DILEMMA

considerable money, but customers are now assured of faster delivery—within 24 hours after an order is received. (See "Boosting Sales with Faster Delivery," DUN'S REVIEW, February 1960, page 44.)

After testing the kits for two years on its own trucks, Moore-Handley set up a special division to sell the system to other companies. (The gear is manufactured by the Stringfellow organization.)

Since then, a furniture maker, Krochler Manufacturing Company of Naperville, Ill., two divisions of Seatest Foods, the Socony Mobil Oil Company, a large automotive parts distributor, Southwest Wheel, Inc., Dallas, Tex., as well as three truck lines, have equipped hundreds of containers with the retractable legs.

Variety of benefits

Here are some of the benefits that these companies attribute to the installation of Morhaul kits:

- A freight forwarder in Jacksonville, Fla., was able to eliminate a terminal at Sarasota while simultaneously speeding up service to customers in that area.
- Socony has eliminated a warehouse at Utica, N.Y. This company employs a standard flat-bed truck pulling a four-wheel trailer with container instead of a tractor-trailer combination.

In this way, the truck with container can act as a delivery truck during the day and an over-the-highway transport at night for maximum utilization of equipment. Since it made the first installation, in the Albany, N.Y., area, the company has been saving $5,000 a year for each of four trucks. The same system could be applied to perhaps 50 more trucks for comparable savings, according to L. E. Reed, manager of Socony's motor vehicles.

- Southwest Wheel finds that the retractable legs save unloading time. As soon as a truck delivers a Morhaul-equipped container loaded with wheels and axles to a regular customer, it picks up an empty. The trucks used to wait for hours to be unloaded.
- The Krochler people report that the new system has resulted in a considerable reduction in damage to furniture that formerly remained on half-

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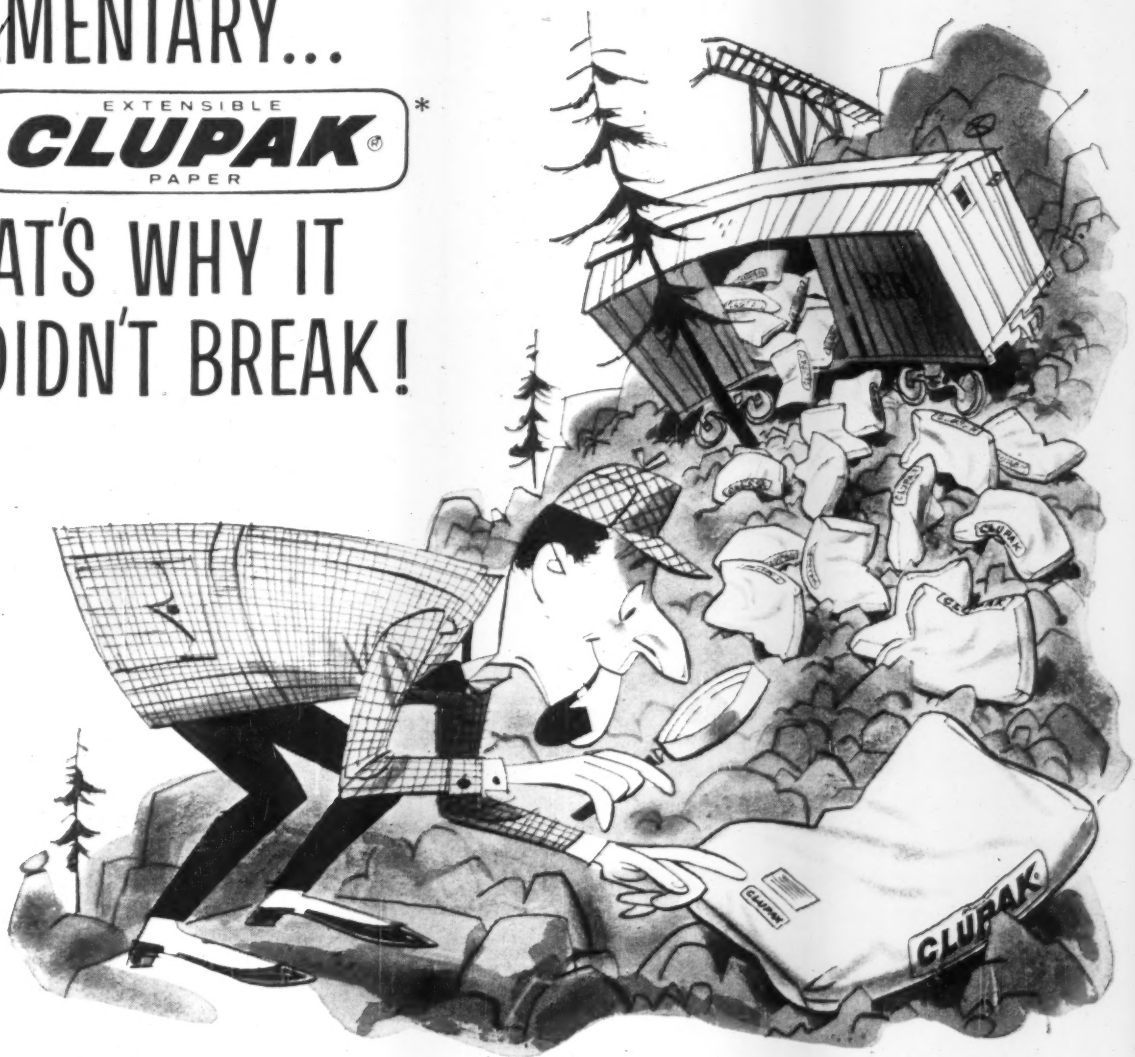
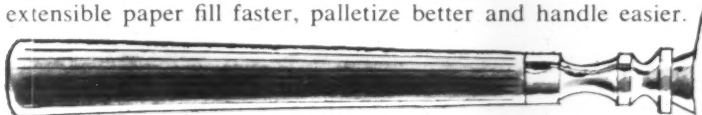
EXTENSIBLE **CLUPAK**® PAPER *

THAT'S WHY IT DIDN'T BREAK!



New CLUPAK extensible paper offers multiwall buyers a happy choice . . . Because CLUPAK extensible paper has a patented, built-in stretch and "give," it simply absorbs most shocks and strains that rip, split or tear conventional kraft. By specifying CLUPAK extensible paper in your kraft bags, you solve your breakage problems once and for all. And multiwalls of CLUPAK extensible paper fill faster, palletize better and handle easier.



Millions of these new multiwalls have proved the advantage of this tougher, stronger paper. Plan a trial shipment of multiwalls, made of CLUPAK extensible paper, as part of your next bag order. Use the CLUPAK trademark when ordering and look for it on the bags. Only then can you be sure the bag paper meets the rigid strength specifications established by Clupak, Inc. for your benefit.

*Clupak, Inc's. trademark for extensible paper manufactured under its authority and satisfying its specifications. Clupak, Inc., 530 5th Ave., N.Y. 36, N.Y.

TIME TO DECIDE

"Do I keep money tied up in trucks... or put it to work making more money?"

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RYDER'S EXCLUSIVE PACKAGE OF LEASING EXTRAS:

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  Your Ryderman expertly designs your fleet to meet your specific transportation needs.
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  Largest number of *wholly-owned* service locations in the business guarantees the most experienced, uniform truck service everywhere.
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  Ryder's continual preventive maintenance keeps your trucks at top performance levels.
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DIVISION OF RYDER SYSTEM

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Ryder System also operates truck lines in 10 states and tank lines in 26 states

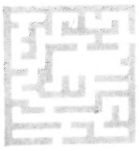
filled trailers which had dropped part of a load en route.

Another approach

The Morhaul system is not the only approach to the problem of LTL deliveries. The Goodling Equipment Company of Meridian, Miss., has developed a comparable system called the "Swap Body." This system also gives the delivery pick-up truck the same versatility as the over-the-road tractor. The "Swap Body" is detachable from the truck—joined, they average 17 to 20 feet in length—and can be left at the shipper's dock for loading and unloading while the motor unit does other small jobs.

Instead of retracting, the legs, which contain lifts, are folded under the body. To lift the body off, the driver cranks at a point on one end, and the lifts inside the legs simultaneously raise that end.

Undoubtedly, other approaches to this problem are possible and will surely appear before long. —M.M.



TRANSPORTATION DILEMMA

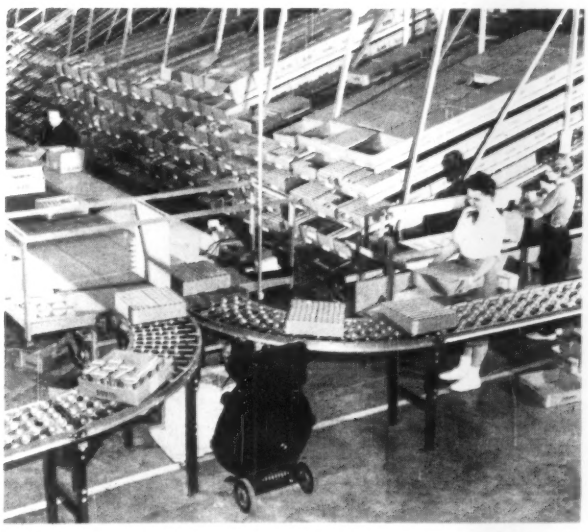
Electronics Simplifies Truck-Loading

A grocery chain gets more out of fewer trailers and trucks by using computers that indicate store layouts on invoices.

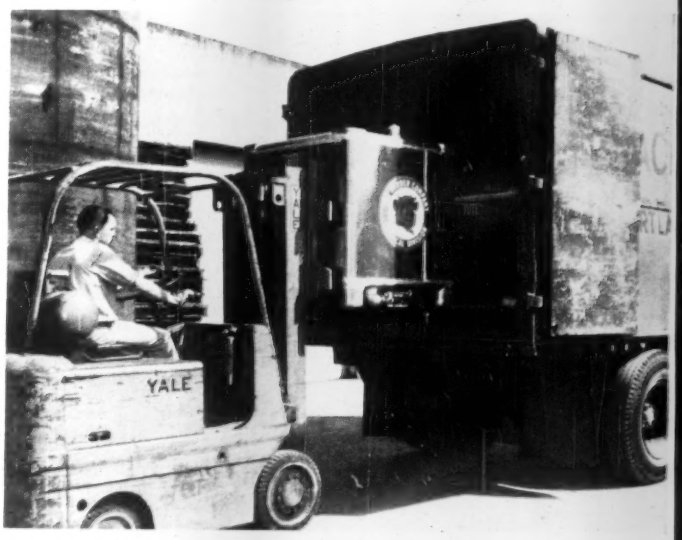
WHAT would happen to your company's transportation costs if all your delivery trucks could be quickly loaded with goods in the reverse order of delivery stops? That's just what a well-known grocery chain is doing cheaply and quickly by means of high-speed electronic computers. And it finds that the whole process of material handling has been improved as well.

Before the computers were installed at the company headquarters of Loblaw, Inc., Buffalo, N.Y., manual methods were used to process orders from the company's 240 supermarkets in western New York and northwestern Pennsylvania. The four Loblaw ware-

How Two Companies Solved Shipping Problems

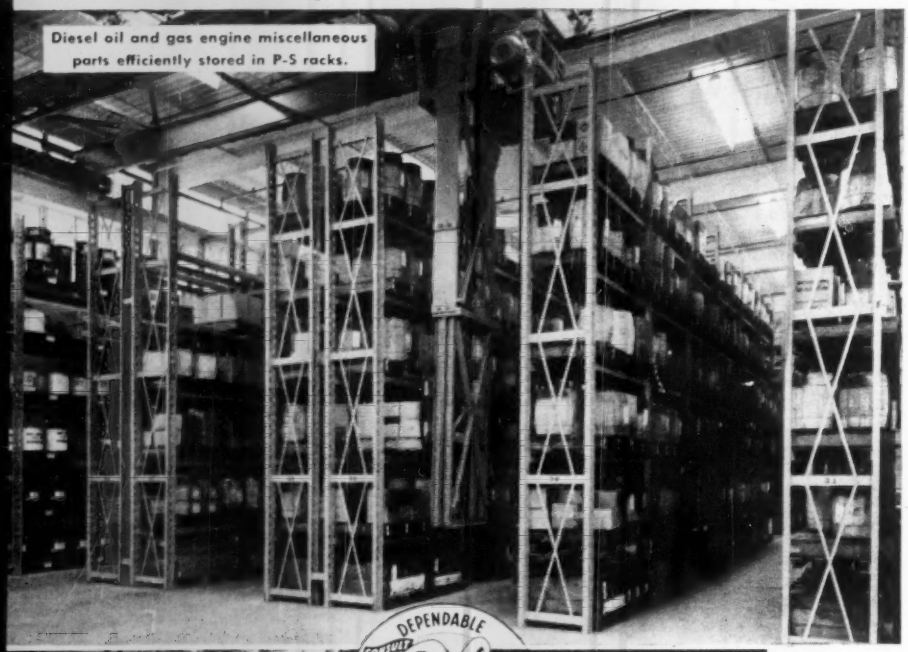


LONG-AND SHORT OF IT: *From this single warehouse at Westwood, Mass., Raytheon Company services all of its distributors of vacuum tubes and transistors—and its sales offices as well. The cost-cutting technique in warehousing that it employs is based on the use of jet air freight for all but local shipments. At this branch point, local shipments go right, and jet shipments left to a waiting truck that takes them to a nearby all-weather airport at Boston.*



STICKY PROBLEM: *To facilitate delivery of adhesives to customers and for interplant transfer, the Chemical Division of the Borden Company converted from drums to these 300-gallon liquid Tote Bins. Despite loss of drum resale income, customers are so enthusiastic over savings in handling and storage that Borden has trouble getting containers back. There is also much less waste from adhesives remaining in the emptied bin than there was in the six drums it supplants.*

How Much Money Can You Save In Your Storage Area?


Diesel oil and gas engine miscellaneous parts efficiently stored in P-S racks.

DEPENDABLE CONSULT P-S FOR THE BEST MATERIALS HANDLING EQUIPMENT

POWERFULLY STRONG

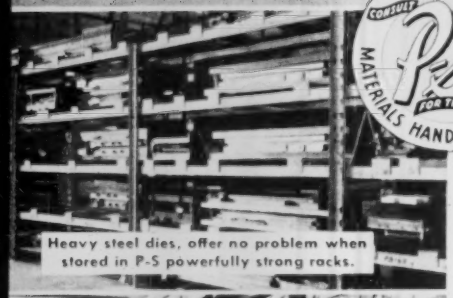
Adjustable

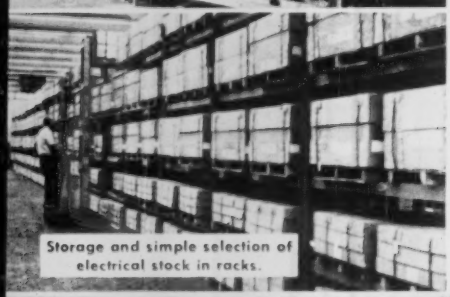
STORAGE RACKS

Simple and Easy to Assemble

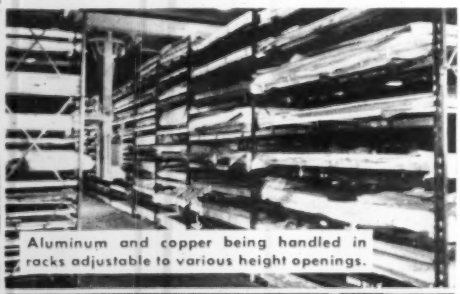
- NO BOLTING
- NO WELDING
- NO SMALL PARTS

Designed and built for any type of storage space requirements, to save you time and money by eliminating multiple handling operations. Can be used anywhere, in any size area; in single, double or multiple sections, to store materials of various sizes, shapes and weights. Also can be galvanized for outside use. For rigid, non-sway support, adjustable members lock by hand into double slots set at angle on uprights at level desired. For a solution of your materials handling problem always consult Palmer-Shile.


Heavy steel dies, offer no problem when stored in P-S powerfully strong racks.


Storage and simple selection of electrical stock in racks.

Racks may be galvanized for outside storage purpose.


Aluminum and copper being handled in racks adjustable to various height openings.

24 feet high racks in automotive

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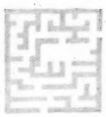


TRANSPORTATION DILEMMA

houses in Buffalo and Syracuse, N.Y., and Youngstown, O., handle some 6,000 items of stock. Until the new system was introduced, "buyers" in the individual stores could not find out what was available in the warehouses until after they had made up their orders for the next day's shipments. They had to wait 48 hours—and sometimes longer—to restock an item that was selling like hot cakes.

There was the additional bother that the order forms were set up according to the floor plans of the warehouses, not of the stores. One of the first changes made after the computers started working was to have special order forms prepared for the stores. The order sheets are designed to conform to the layout of the individual store. The computers now prepare invoices that indicate the sequence in which the goods are to be placed on the delivery truck.

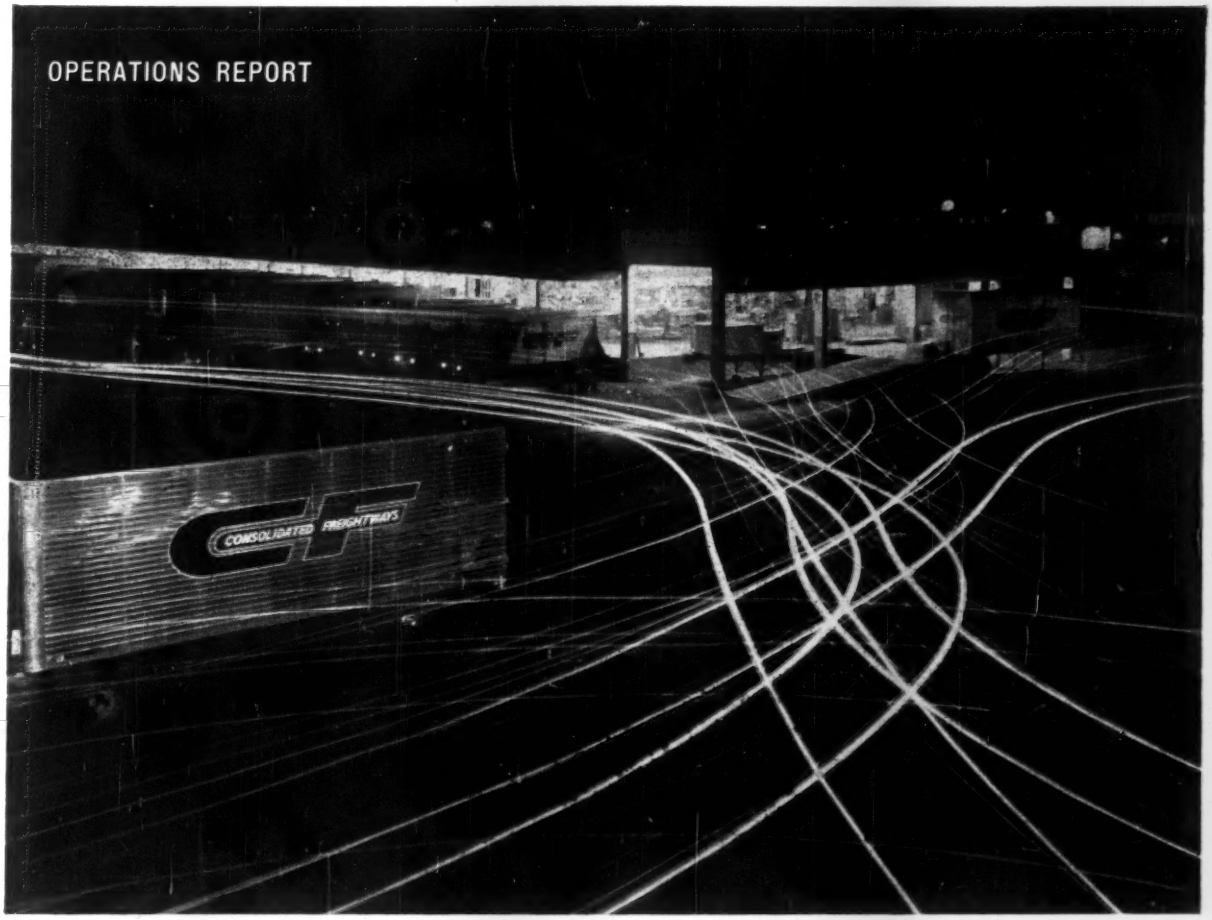
The invoices are then checked by the Transportation Office. Since they indicate the total weight of the shipment and the distance of the store from the warehouse, traffic clerks can quickly and accurately determine the type and number of trailers required each day—another saving in shipping costs. The computers also indicate if only a partial shipment is available.

Simplified assembly

The computers break down the invoices according to the location of items on the warehouse floors. What's more, the sequence of items on the break-down is arranged in the direction in which the order assembler travels.

Since the computers have memorized the exact inventory in each warehouse, only items actually available are indicated on the invoice and the total number of cases to be picked are marked on the forms for order assemblers. This means that a simple "nose count" of cases can tell if the order assembler has made any errors.

The order assembler drops off his load for each store at the "Towvayer." At the loading dock, the loader works from the "loading guide," which is prepared from the original invoice for the store. Again, he can



Part of your business always works after hours

After the sun goes down, CF terminals glow with the headlights of trucks moving out for next morning delivery of freight to nearby communities. Such overnight service is an essential part of thousands of American businesses, large and small. That's why Consolidated Freightways gears its terminals, pick-up fleets, and schedules to the job only trucks can do so well—short haul distribution.

The CF system is also ideally suited for dependable motor freight service *between* key distribution centers with our famous Daysaver thru-schedules.

We entrust such diversified services as bulk commodities, heavy hauling, containerization, cartage and household goods to separate divisions. Other specialists supervise refrigerated service and export-import traffic.

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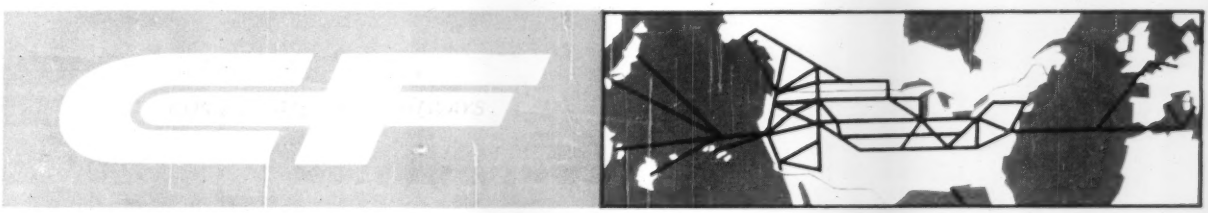

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DUN'S REVIEW and Modern Industry

check the accuracy of the shipment by a simple case count that must conform with the case count marked on the guide. Working with the loading guide, he can then load the trailer to conform to the sequence of stops, if more than one store is to be serviced by that trailer. This means a quick turn-around for the trailer.

Obviously, the computers—Remington Rand Univac 60's—were not installed simply to cut transportation and handling costs. They also handle inventory control, general accounting, payrolls, computation of various city sales and income taxes, and a wide variety of reports to aid management in making decisions. —M.M.

TRANSPORTATION DILEMMA

Unified Distribution-Traffic Aims at Customer Service for Sales

Scott Paper has organized a single group to research, oversee, and expedite flow of all raw materials and goods, cut transportation-distribution costs, and improve reliability of service.

IF customers get good service, they buy—and buy again. In a marketing economy, says the Scott Paper Company, transportation must be oriented toward giving good service and building sales.

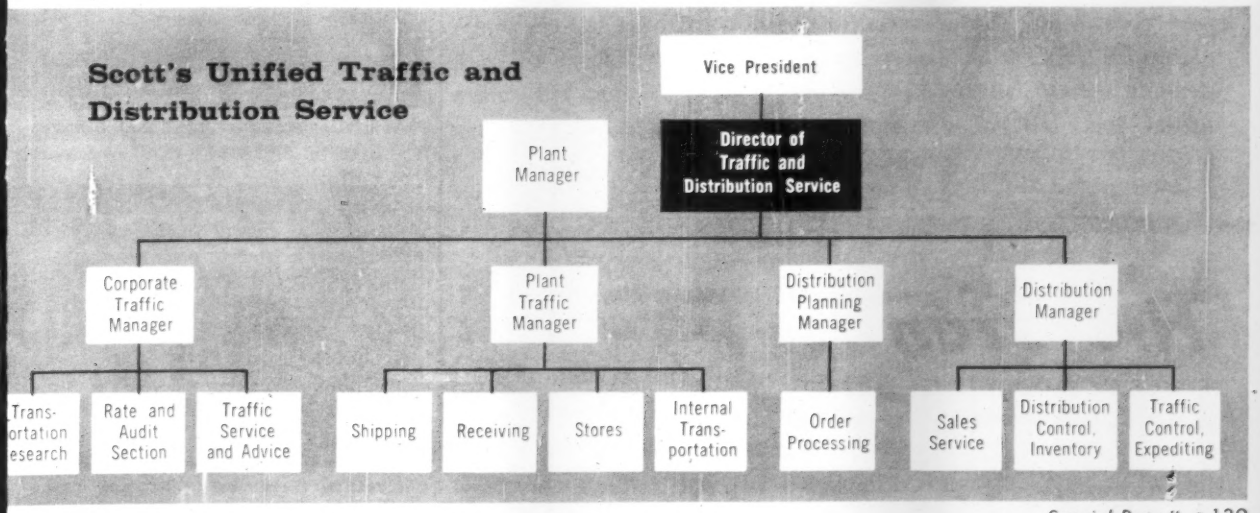
The big paper products company (1959 sales were $279 million) sells to the fast-turnover grocery business and has more than fourteen plants and mills scattered around the United States. Its products can be ordered in thousands of combinations of trademarks, sizes, and colors.

No one Scott plant produces the whole range of retail products. Shipments must be "mixed," so that customers get the assortment they want.

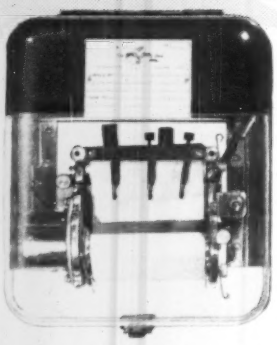
Shipments must also, of course, arrive on schedule. And—a major consideration in dealing with bulky products—the cost of transportation must be kept down.

Ten years ago, Scott Paper began objective studies of its distribution, sales service, and traffic problems.

"Ours was a problem a multi-plant company often faces," says O. H. Miller, now director of traffic and distribution services. "We felt that an effective blending of sales serv-



HOW MUCH DOES
SHOCK
COST?



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True, Impact-O-Graph won't give you the **cost** of shock . . . directly. But it **will** measure the amount of shock your product receives in normal handling. With this information you can take steps to protect your product from costly shock-damage.

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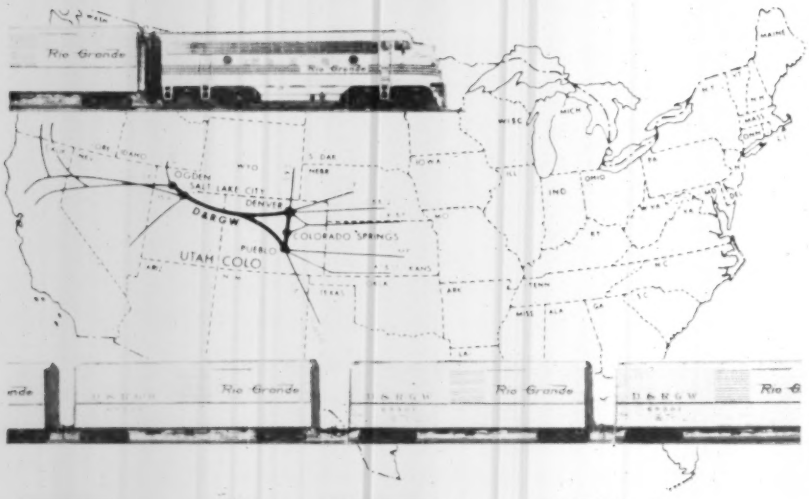

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TRAFFIC OFFICES
IN 38
MAJOR CITIES

TRANSPORTATION DILEMMA

ice and traffic was necessary to control all the transportation and distribution functions and responsibilities."

The company ships mainly by rails, but also uses trucks and marine transportation for some of its freight. Ten years ago, it came up with a system that puts the flow of materials to plant and the flow of products to dealers under the control of one man—the director of traffic and distribution services.

Three years ago the staffs reporting to this executive were reorganized into three key departments.

- One group, under a corporate traffic manager, researches, audits, and negotiates transportation rates. It also searches continually for improved ways to move raw materials and

Logs to pulp plant.

Products are mixed at distribution centers and at public warehouses.

Shipping out by railroad.

goods. And it determines transportation costs when the company is considering new plants, products, or markets.

- Another group, under a distribution planning manager, works with the operations research division to come up with a consolidated distribution plan and budget. The distribution planning manager also oversees order processing.

Scott's mechanical research department designed the company's Al-Pac (Analog Linear Programming Algebraic) computer specifically to solve problems created by multi-plant production, warehousing, product mixing, and solid and mixed carload shipping.

Sales estimates, production costs at various plants, transportation costs of various products in various quantities, all are fed into the Al-Pac to help the staff develop a production-distribution plan for the anticipated sales year that maps the most efficient over-all scheme of production and transportation for any particular market.

- The third group, under a distribution manager, administers the actual movement of materials to plants and of goods to warehouses and retailers. It fills orders, controls inventory, and carries out distribution policy.

Integrated shipments

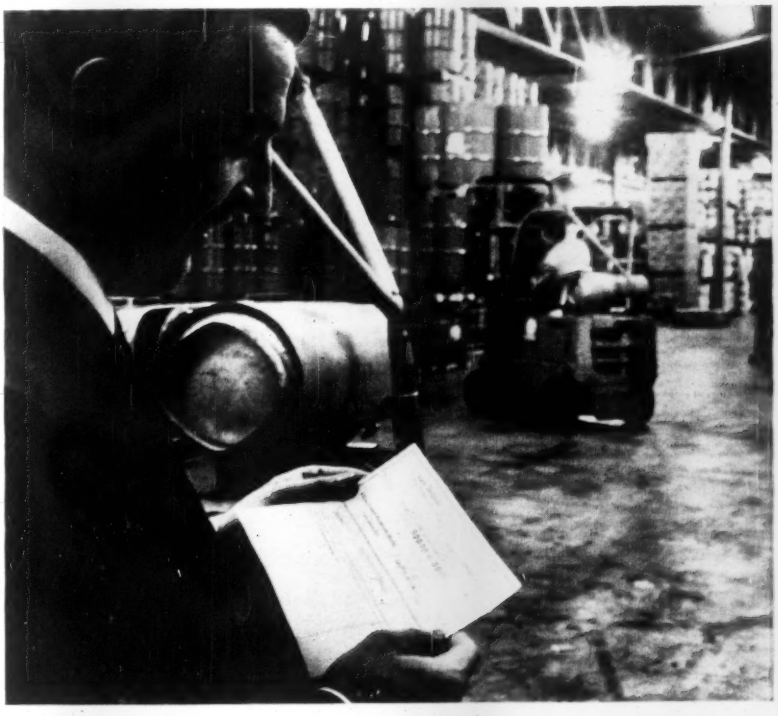
Years ago, the customer who wanted a variety of the products that are made at separate plants got a separate shipment from each plant. Today, with distribution and traffic under one control, he often gets one shipment that includes a variety of products.

The computer has meant increased efficiency in mixing products and warehousing them. It once took 48 hours to process a "rush rush" order. It took from five to seven days to process a routine order, as it went back and forth through order editing, sales service, traffic, and distribution control units. Today many orders are loaded the same day they're received at the plant.

But as Miller points out, "The customer is more concerned with the consistency of service than with speed."

To supply a customer in a Midwest city during a special sale, Scott recently had to time shipments to the day so as not to overload inventories. Every shipment arrived on schedule.

One way to lick tight money problems...



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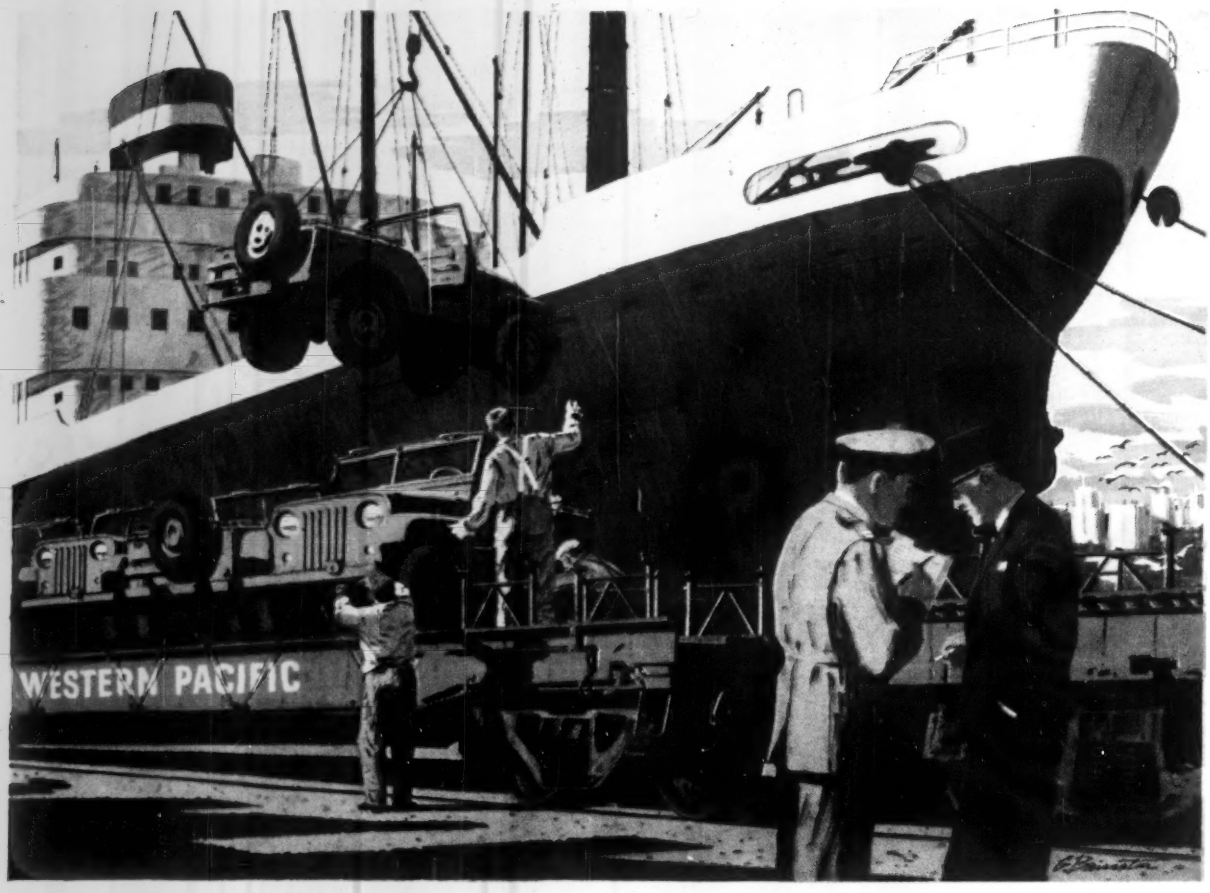
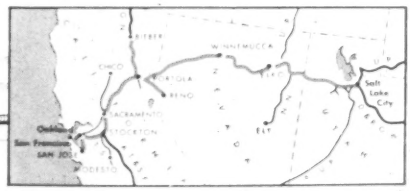


Western Pacific comes up with new way to ship Jeeps

(AND SAVE TAXPAYERS $255 PER SHIPMENT!)

Here was the problem: how to cut the cost of shipping Jeeps from Tooele Ordnance Depot in Utah to Pacific Coast ports for export. The solution, as developed by Western Pacific's Research team in collaboration with the military: invent and build demountable cradles for installation on an 85-foot piggyback flat car and carry 15 Jeeps in a cross-wise position instead of the 8 previously carried on standard flat cars. Results? Loading and unloading costs were reduced from $20 to $3 per Jeep.

This is the kind of special service now offered by Western Pacific's new customer-oriented Marketing Division, a team of experts in every phase of transportation with this common objective: BETTER SERVICE FOR SHIPPERS AT LESS COST.



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WESTERN PACIFIC

ROUTE OF THE VISTA-DOME *California Zephyr*

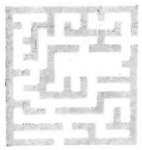
Combining sales service functions and traffic functions was one of the recommendations of the first company studies. Both the customer and the salesman now benefit from the fact that one department is now responsible for getting an order filled and shipped.

"We know," says Miller, "that this kind of over-all organization—which also is responsible for in-plant traffic—has helped us figure and cut distribution costs. It has also provided better service. And it has helped sales.

"Our present organization, with its research, its use of the computer, and its responsibility for over-all control of distribution and traffic, is much more savvy in techniques and methods. Sales look to us to keep up and ahead of the competition in serving the customers.

"Sales people don't have to worry about whether the product will get there. Our production managers aren't worrying about materials coming in on time. Those are our functions."

Like Scott, hundreds of companies are more and more concerned with the problems of traffic and distribution. Miller is convinced that the traffic manager in the next five years is going to take on the responsibility for distribution in a wide segment of industry. —J.R.M.



TRANSPORTATION DILEMMA

Air Reduction Squeezes Traffic Costs

Chemical company uses heavy trucks, preventive maintenance, precise scheduling to achieve high efficiency in its private trucking and concerted efforts at every level of management have brought its carrier freight bill down.

"WHAT we really need in facing our transportation problems," said the president of a big manufacturing company recently, "is hard, creative thinking.

"Top management—the men who run companies like Air Reduction—realize that transportation is one of the big costs of operating. Now it's up to traffic managers to live up to the challenge, to make transportation really contribute toward sales and profits."

Although he mentioned Air Reduction Company, Inc., only casually, this executive was pointing an accurate finger at a pace-setter in "hard, creative thinking" about transportation improvement.

Air Reduction, with sales topping $200 million, has ten divisions, operates more than 150 plants and some 250 sales offices and warehouses throughout America. It sells industrial gases, equipment, and supplies through more than 2,000 dealers and distributors.

The company and its divisions spend millions of dollars to move all kinds of bulk, liquid, and chemical products by common carriers. The divisions also operate more than 2,000 different pieces of trucking equipment, ranging from ranch wagons to five kinds of bulk and five kinds of liquid trailers. Some of these vehicles cost as much as $60,000 apiece and roll over 12,000 miles a month.

The company makes carbon dioxide, calcium carbide, industrial gases, welding and cutting equipment and supplies, acetylene-based chemicals, medical gases, and related equipment. Virtually every major industry uses its products. Moving materials into the plants, and products on to the consumers, is a major problem and a major cost.

President John A. Hill said recently, "Distribution is our most serious cost area."

Air Reduction has been cutting this cost wherever it can without lowering its standards. The company's private truck fleet is known for its efficiency.

SERVICE. *Air Reduction operates more than 2,000 different trucks and trailers, stresses service in moving its products to customers, who are in almost every industry in America.*

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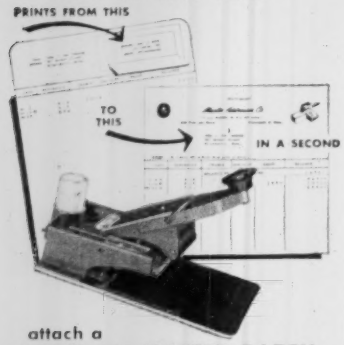

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TRANSPORTATION DILEMMA

In three years, the portion of the sales dollar that had to be turned over to common carriers for freight was cut by nearly 17 per cent.

Air Reduction's truck fleets are operated independently by each division, but the Air Reduction Sales Company, by far the largest division, tends to set the pace and standards for the others.

C. H. Glasier, executive vice president of the Sales Company, explains, "Basically, we operate our own trucks because of the particular service required by our customers, and because of the peculiar nature of some of our products. Many places we have to make deliveries at a scheduled hour."

Because of the stress on service, management has concentrated on specific, well-thought-out means to achieve greater efficiency.

Divisions do maintenance

For instance, industrial gas divisions do their own truck maintenance, with the emphasis on the preventive variety. "It's not necessarily the least expensive way to keep the trucks going," Glasier comments, "but it guarantees we'll get there."

For many years, the company also has bought heavier, rather than lighter, equipment to do a specific trucking job.

"Four years ago," Glasier says, "we made a study of the life of our trucks. We were averaging better than five years. And some of our big units run up to 12,000 miles a month, month after month.

"If you spread the difference in capital cost over the lifetime of the unit, you can see we've been getting more efficiency out of a heavier truck for our particular service."

Until recently, Air Reduction divisions generally stayed clear of diesels. But with the increased efficiency of the big oil burners, Glasier reports, "We're going more and more to diesels for units doing more than 5,000 miles a month."

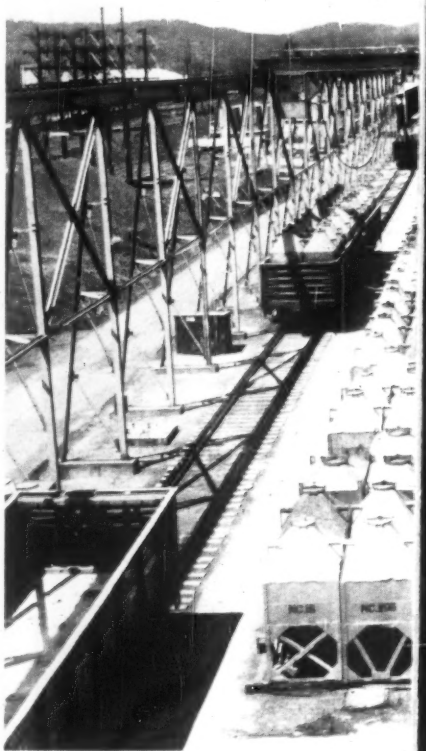
The division distribution managers emphasize sensible scheduling of deliveries, too. "Making deliveries in off-hours is a problem everywhere in industry," Glasier points out. "But we use night deliveries wherever we can, and our bulk trailers move around the clock."

Air Reduction divisions often set up storage units on customer property which can be serviced even when the customer's receiving department is closed.

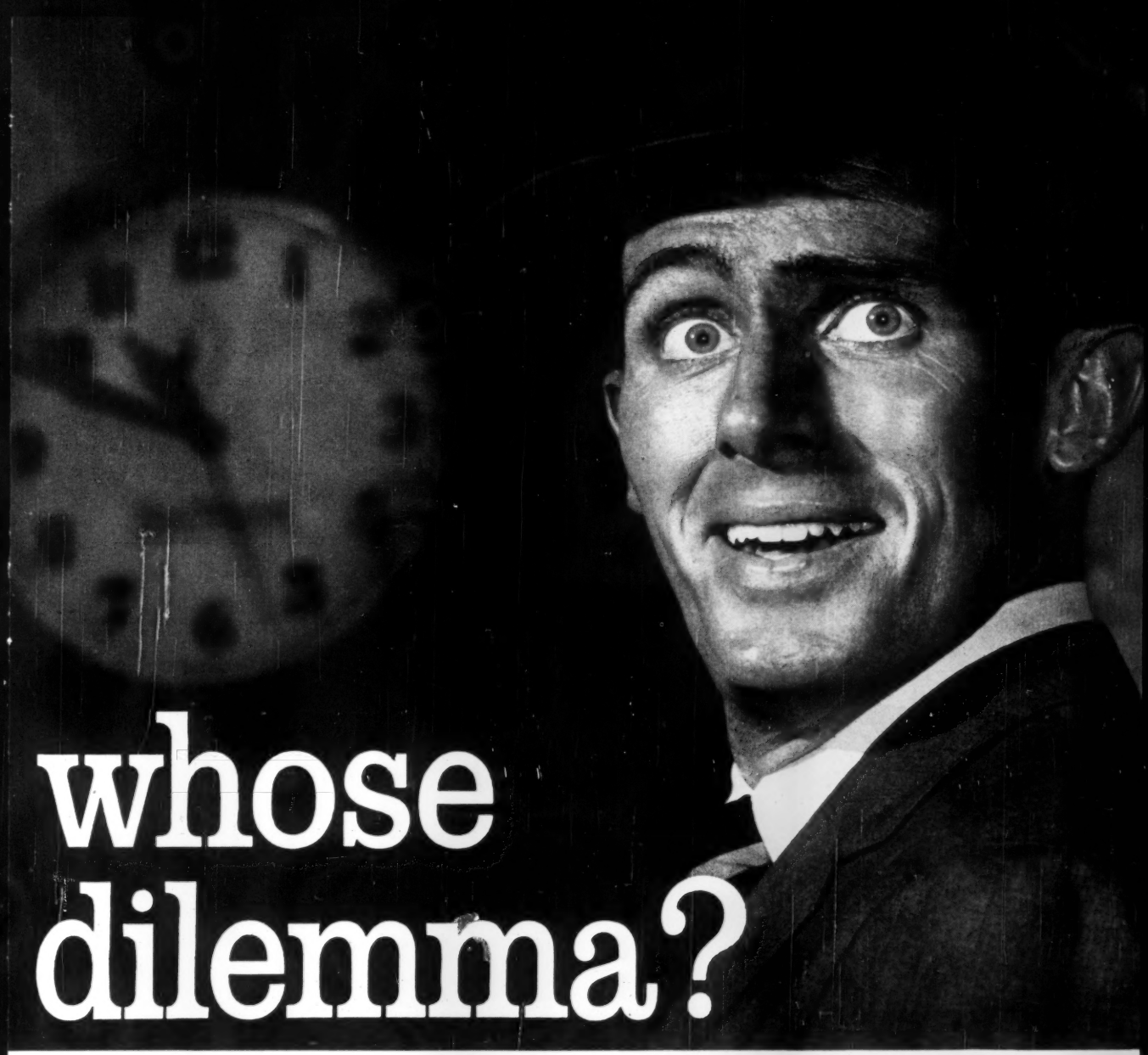
One of the company's major distribution problems has been the handling of gas cylinders—such as those used for welding. Shops, plants, and factories get these in comparatively small amounts.

"We have come to believe," Glasier says, "that distributors and dealers often are better equipped to handle such smaller customers efficiently. Consequently, our cylinder trucking is going down."

Air Reduction, as distinct from its divisions, comprises corporate officers, comptroller, payroll, and similar groups—and five departments: industrial relations, purchasing, engineering, research, which is mainly consolidated in a big laboratory at Murray Hill, N.J., and the general traffic department at the headquarters



CONTAINERIZATION. *For years, Air Reduction has been moving carbide in containers that are used for in-plant transportation and fit specially-made hopper-type cars, 12 five-ton containers to the car.*



whose dilemma?

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TRANSPORTATION DILEMMA

office in New York City. Although the private truck fleets are run by the divisions, Air Reduction's common carrier traffic is run at the top.

"We move all kinds of goods by common carrier," says J. W. Peterson, general traffic manager. "Most of our traffic moves by rail, some by truck. A lot of chemicals, like liquid oxygen, have to go in special equipment, and we're rather proud that we've been using 'containerization' now for something like twenty years in our special container car for carbide." (See photo on page 144.)

Like any traffic department worth its name, the Air Reduction group constantly studies volume of materials movements, rates, the cost of leasing the many special cars it must have for chemicals and gases, and so on.

Not the whole reason

But such studies are only part of the reason Peterson has succeeded in paring the percentage cost of transportation without impairing efficiency.

In 1956, Air Reduction's freight bill totaled a little over 7 per cent of sales.

Last year, it was down to less than 6 per cent of sales—a cut in transportation costs of almost 17 per cent in relation to sales.

"One reason we've been able to do this," Peterson points out, "is that our volume is up. We're shipping more, and volume means lower rates."

Air Reduction has grown tremendously over the last ten years, more than doubling sales in the period from 1950 to 1959. From 1956 to 1959, sales went up almost 18 per cent.

But increased volume and lower rates do not explain the significant increase in efficiency. This, Peterson notes, should instead be attributed to several factors in Air Reduction's approach:

- Management from top to bottom, from production to sales, has been hearing more and more about how freight economies can make the difference between profit and loss in many operations.

"We've gotten this message across to plant managers, shipping people in the plants, sales people, and line man-

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And what is the advantage to you? For just one thing, consider collision repairs. Here are actual crash-repair costs for The Lark, as compared with a typical small compact car, and a typical 6-passenger compact car—taken from the latest edition of MOTOR's "Crash Book Service"...

	LARK 6 DELUXE (Frame & Body Construction)			TYPICAL SMALL COMPACT (Unitized)			TYPICAL 6-PASS. COMPACT (Unitized)		
	PARTS	LABOR	TOTAL	PARTS	LABOR	TOTAL	PARTS	LABOR	TOTAL
REAR CORNER COLLISION, *Right Rear*	$89.55	$62.50	**$152.05**	$96.15	$75.00	**$171.15**	$122.85	$69.00	**$191.85**
	SAVE AS MUCH AS $39								
STRAIGHT REAR END COLLISION	$192.50	$74.00	**$266.50**	$207.10	$200.00	**$407.10**	$239.15	$120.00	**$359.15**
	SAVE AS MUCH AS $140								
FRONT CORNER COLLISION, *Right Front*	$143.80	$50.50	**$194.30**	$205.60	$115.50	**$321.10**	$259.80	$100.50	**$360.30**
	SAVE AS MUCH AS $166								
STRAIGHT FRONT END COLLISION	$255.85	$83.00	**$338.85**	$358.95	$211.00	**$569.95**	$453.45	$181.50	**$634.95**
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(All necessary parts included. Labor figured at $5 per hour.)

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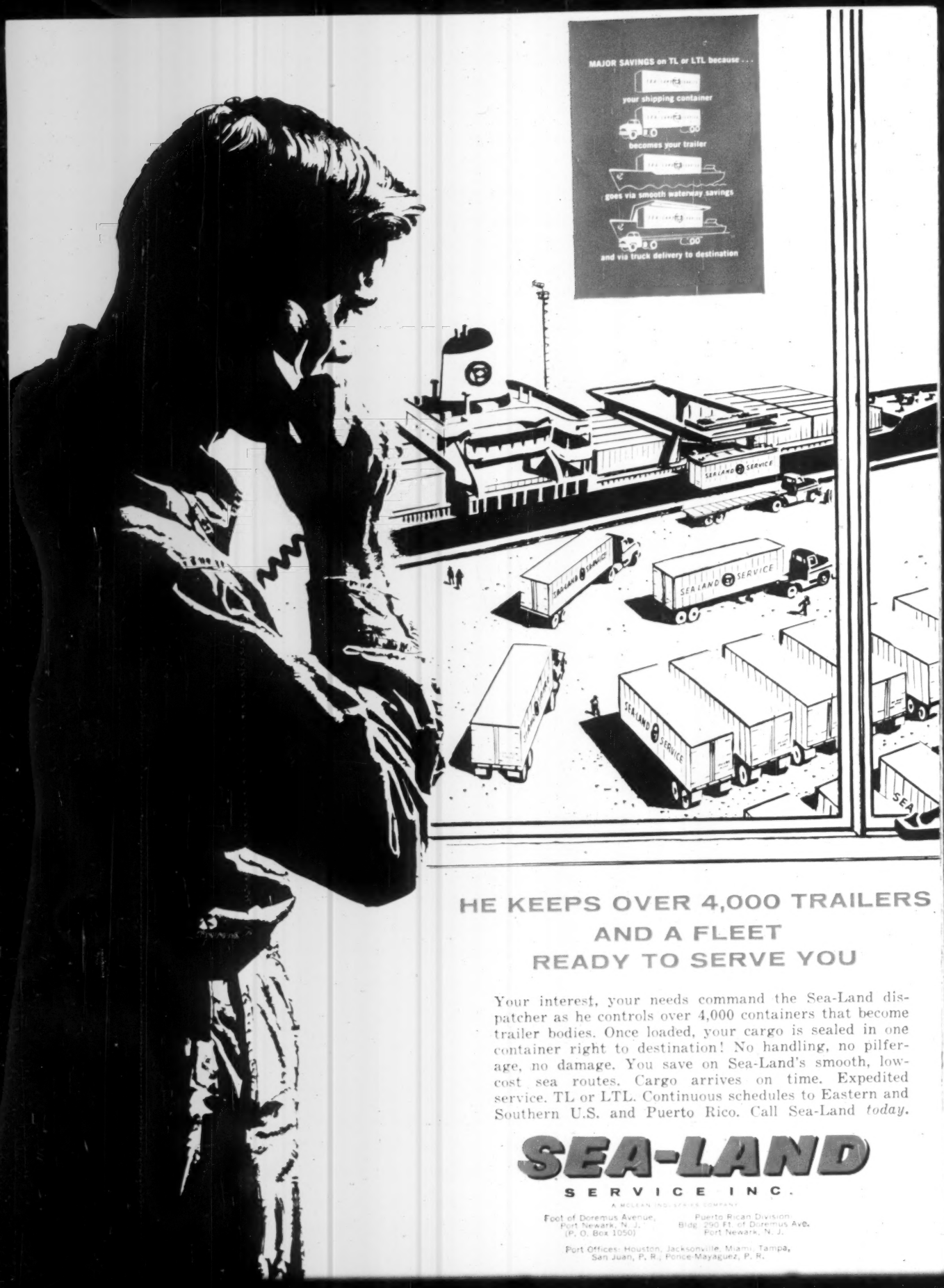
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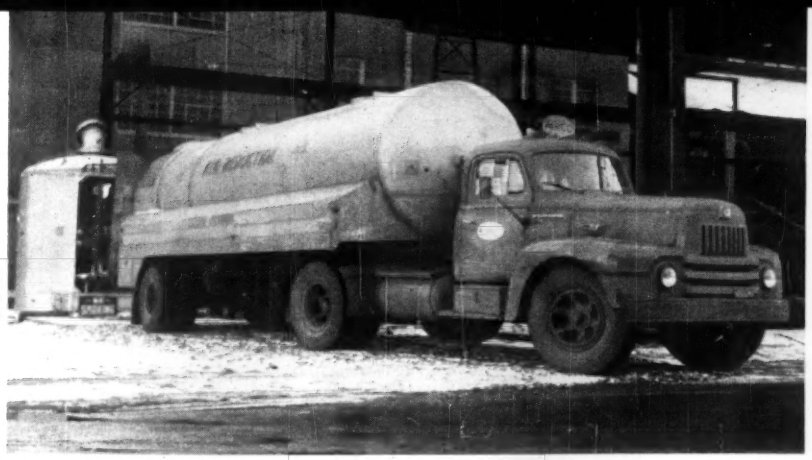


SERVICE: *Air Reduction storage tanks set up on customer property permit delivery at most convenient hours, when receiving departments may be closed for the night.*

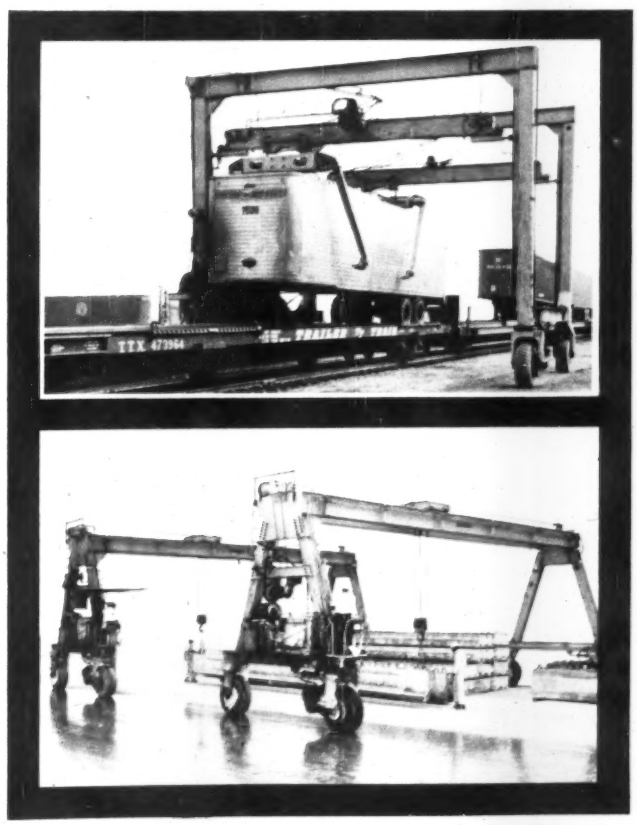
agers throughout the country. We're paying much more attention to consolidation of small shipments into full carloads and truckloads. And that makes major savings."

- Continuing study and realignment of volume shipping has meant continuing study of rates. Peterson says, "The carriers are all competitive in some way. After you take into consideration the essentials—service, constant movement, and the like—you have to find the cheapest rate. Many of the carriers have come to see that lower rates and more volume mean more net at the end of the year."
- Air Reduction has been using special containers for a long while. The company has a number of specially-designed cars, including a new tank-in-a-boxcar for extra safety in moving liquid oxygen. Special cars carry carbide containers that are used for in-plant as well as in transit shipment.
- As part of its studies, the traffic department watches closely to make sure the cars are going on the best routes, and strives to decrease the total number of cars needed to move the same or more material.

"Perhaps the major thing that's helping us pare transportation costs is the fact that everyone at Air Reduction is aware of them," Peterson believes.

"We have close liaison with purchasing, with everyone concerned, and if we spot any possible economies, we go right to the head of the division when necessary. We think this kind of awareness and attack only makes sense when you're paying big freight bills." —J.R.M.

Reprints of this Special Report, "Transportation Dilemma: The Way Out," are available at 30 cents each from Reader's Service Department, DUN'S REVIEW & MODERN INDUSTRY, 99 Church Street, New York 8, N.Y. Please send payment with order. Discounts on 100 or more quoted on request.



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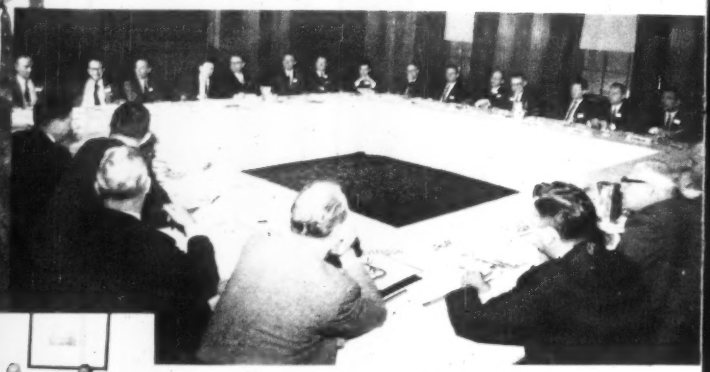

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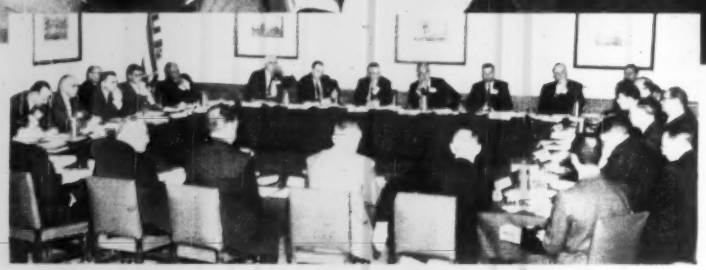

Chicago

Editorial Round Tables Explore Fresh Solutions to Shippers' Problems

TRANSPORTATION DILEMMA

Scores of transportation users, carrier executives, Government experts, and other authorities freely shared their ideas and experiences at three day-long editorial meetings conducted by the editors of DUN'S REVIEW. Most of the participants agreed that:

- Transportation is a more serious problem for manufacturers today and deserves more attention by top management.
- Advances in technology and changes in public policy are bringing new approaches that will have important effects on the distribution plans of many manufacturing companies.

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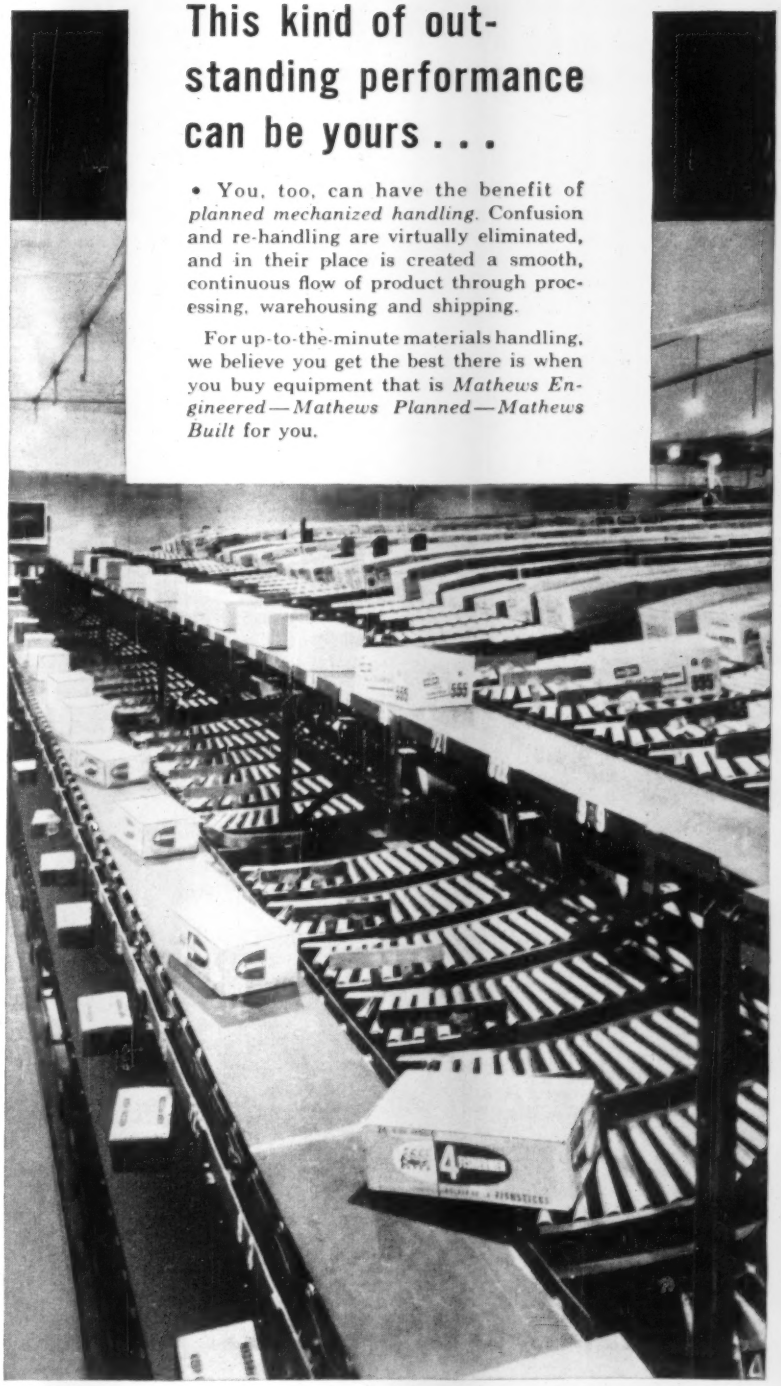

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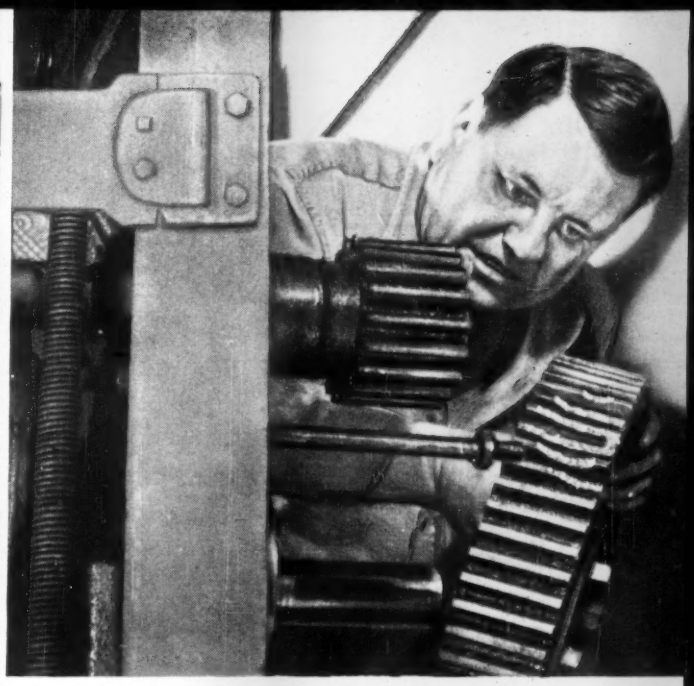

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Managing Your Manpower

LAWRENCE STESSIN

» *Are disgruntled scientists and engineers the misfits of industry they sometimes seem—or are they just mismanaged?*

» *Today's employee is getting a longer vacation, and more of the company's money to spend while he's away.*

THE unhappiest man in your company is not the fellow who was turned down for a raise yesterday. Instead, he's the one who makes pretty good money, enjoys lots of benefits, and is usually treated with kid gloves.

Who is he? He is the engineer or the scientist on your payroll.

His ranks in industry are a million strong, and growing at eight times the rate of the labor force as a whole. But almost all of these professionals are presenting management with a complex of baffling personnel problems. Last year a University of Chicago survey indicated that 75 per cent of the scientists polled were dissatisfied with the way they were being handled by the corporations they work for. Now, independently of each other, two more studies have reached virtually identical conclusions—the scientist and the engineer are restive, frustrated, and poorly motivated.

Why the discontent?

What is the nature of their grievance? It isn't salary, benefits, working conditions, or other garnishings designed to improve employee morale. The root of the problem, says Opinion Research Corp. of Princeton, N.J., is a basic conflict between the "scientific mind" and the "management mind."

Planning, for example, is the heart of the management function. To know where you're going you must focus on a goal and set up a timetable for completion of a project. This is just what nettles the professional. More than 75 per cent of those queried by ORC said that they worked best "in an atmosphere free from pressure." This means, among other things, freedom from such corporate conformities as working an eight-hour day, coming in on time, meeting deadlines. Punctuality in coming to work is so sore a point with so many scientists that some companies overlook tardiness and even turn the other way when a member of the brain set decides to knock off early in the afternoon to do his thinking at home.

A growing trend in larger companies to which research means "live or die" is to set up special labs where the professionals can work without supervision, without calendar restrictions, and without fixed personnel policies. At Corning Glass, the formation of a pure research group resulted in the discovery of a new product so marketable that it almost doubled the company's earnings in a two-year period.

Other differences grow out of opposing methods of decision-making. The profit mix is what dictates the manager's approach to problems. As a result, he has to make decisions on limited information; he has to take risks regularly; he has to focus on practical results. The professional is motivated by a greater degree of caution. He would rather investigate all angles before saying "yes" or "no." He avoids risks—fearing that a plunge, if it turns out to be a mistake, will reflect on his intelligence. His devotion is to the theoretical rather than to the "sales angle." He would rather receive an accolade from his colleagues than a letter from the vice-president in charge of marketing.

The scientist's ego apparently does not get the tender, loving care it deserves, according to *Characters of Engineers and Scientists*, by Lee Danielson (University of Michigan, Bureau of Industrial Relations). Management gets all the kudos for industrial progress, the engineers and scientists say. Executives win recognition, stock options, public acceptance when actually, the professionals charge, they are trading on the creativity of the men at the drawing boards and in the laboratories.

Recognition helps

It is to meet this ego-deflating condition that Ampex Corp., for one, does not limit stock options to corporation brass, but also gives this type of monetary incentive to engineers and scientists for special achievements, too.

Professional and technical people share one ambition with less brainy breeds—they want a chance for advancement. And here they reflect a frustration common even to blue-collar workers. A disturbing 67 per cent of the engineers and scientists told Opinion Research interviewers that "getting ahead in management is based more on politics than on knowledge." In other words, they echo the familiar cry: "It's not what you know, it's who you know."

A supplement to this complaint is that "getting ahead" means shifting into the administrative and management ranks, where the big jobs, the big rewards can be found. This notion will come as no surprise to front office personnel, for companies have been wrestling with a solution to this problem for some time. And some corrective steps have been taken: IBM, Standard Oil of California, General Electric, and Ampex have adopted the idea of the "professional career lad-

der." This encompasses two lines of progression. The scientist who wants to go the managerial route is encouraged to do so—but the one who prefers to stick to research is not set off in some cubbyhole that has no outlet to the top. Instead, he is given the same rank, the same pay, the same status symbols—offices, profit sharing, freedom from supervision, parking privileges—as the managerial groups.

A final conflict is one of loyalty. The manager has allegiance to his employer, the scientist to his profession. He is not interested in being dubbed a "good employee." He seeks recognition outside the company's walls. He wants to write papers, appear at professional meetings, take time out to travel to conferences, give courses at a university. Although many research-minded companies have adopted policies which permit and encourage this devotion to profession over company, such freedom cannot always be allowed.

A scientist or an engineer who has discovered or developed something new is always anxious to let the world know. The company, operating as it does in a competitive world where others are ready to turn its creativity to their own profit, cannot always accede.

How can you combat the professional man's unhappiness in a system that undoubtedly will go on being dedicated to profits? One approach is suggested by the ORC study:

"More professors with an industrial background can help give pupils an idea of the realities of competitive corporate life. New emphasis is needed in the curriculum on the role scientists and engineers play as employees in a corporation."

Vacation Trend Is Up

The fastest growing fringe on the payroll dollar is vacation pay. A study of the bargaining settlements inked in the past six months shows:

- Vacations have become virtually universal in industry: 95 per cent of the current union contracts provide paid vacations for the rank-and-file.
- Four weeks' vacation, though still a rarity, is pushing into the trend column. Three years ago, less than 1 per cent of the union agreements called for a month's paid vacation after 25 years of service. Today it is 5 per cent.
- Vacation eligibility is being narrowed. Today the new employee with less than a year's service usually gets a week's vacation with pay.
- Another inroad into what was a standard pattern affects the time eligibility for two-week vacations. Most companies now grant two weeks vacation after only two or three years of service.
- Three weeks' vacation is no longer novel. It used to be three weeks after fifteen years, but this has been whittled down to twelve years. And a sprinkling of contracts give three weeks of vacation after ten years.

There are also changes in the way vacation money is computed. Most companies figure vacation pay on a basis of straight-time hourly earnings. But unions have been asking that shift differentials—as well as overtime—be included in the computation base, and have succeeded in carrying their point in 5 per cent of the pacts negotiated this year.

Working Conditions, Office-Style

Personnel policies affecting office workers are changing, and the trend indicates a relaxation of the old rules. So says the National Office Management Association, after analyzing the results of its "Office Customs Survey" of 2,300 business, industrial, and service organizations in the United States and Canada.

Highlights:

- Personal telephone calls, once prohibited or limited, have become an accepted practice. Not only can the office employee make outside calls without restriction—he may receive incoming calls at any time.
- Hiring of kin has also become less restricted. Wives of office personnel are no longer banned—in fact, their applications are welcome.
- Rules about married women are less stringent in general. No loss of job is in store for the girl who gets married. If she becomes pregnant, she is allowed to continue on her job for six months, and can take a leave-of-absence if she plans to come back.
- Smoking is no longer a clandestine practice, and 75 per cent of the companies surveyed permit office employees to smoke without restrictions.

Absenteeism note: married women with pre-school children aren't absent more often, as a rule, than other office employees. Most companies pay when a married woman has to stay at home because her child is ill. END

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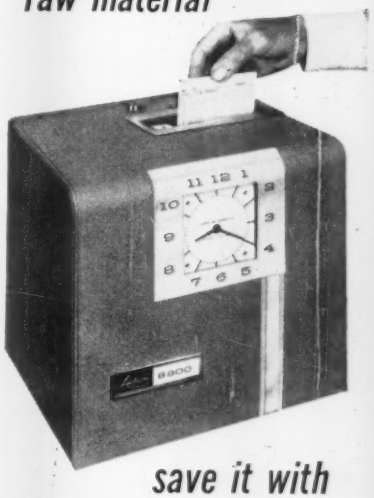

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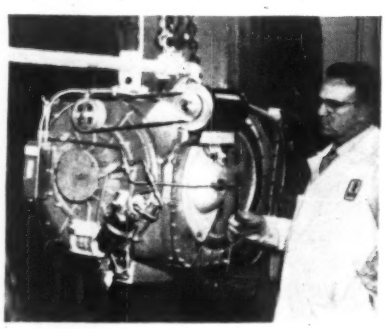

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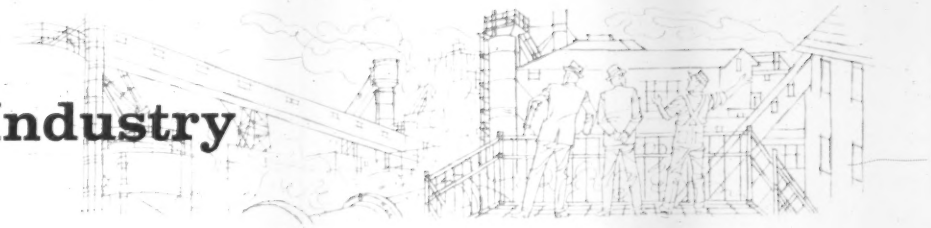
Inside Industry



Updating Make-or-Buy

- *Needed: sharper "make-or-buy" pencils*
- *Don't go off the deep end when you automate*
- *Inventory of technical skills can speed organization*

Despite all the discussion of make-or-buy over the years, too many manufacturers are still carrying the burden of unrealistic or undiscriminating make-or-buy decisions. That's the firm belief of most leading consultants and others who have studied current practices in this area in U.S. industry. In addition, many companies fail to tie make-or-buy policy to broader questions of long-range policy.

As an example of an unrealistic decision, Philip Cannon of Barrington Associates cites the company whose accountants had figured out the overhead on production equipment, then applied it to all machinery as a simple average. As a result, screw machinery carried an unrealistically high overhead rate, the same as for a costly foundry. On the basis of this rate, this medium-size company was farming out screw products it could have made more cheaply in its own shop.

This is an extreme example of the distorted "make-or-buy" decisions that can result from uncritical use of conventional accounting procedures. But basing such decisions on incorrect information is a widespread failing in American industry, says John F. McCabe of Cresap, McCormick, and Paget. Medium-size manufacturers suffer most from lack of a good make-or-buy policy, he reports. On the one hand, they lack the trained staff that is characteristic of large companies; on the other hand, their top managements no longer have the small manufacturers' intimate knowledge of the production process.

Another weakness is failure to integrate make-or-buy policy with long-range plans for expansion. Once they have studied those long-range plans carefully, executives may have to reverse make-or-buy decisions that seem perfectly proper for the moment. For example, if a company plans to expand its sales in a growth market, it might soon become cheaper to make some sub-assembly components it now farms out. Conversely, an expected expansion in sales may dictate farming out some part so that the available production facilities can be diverted to meet the need for critical assembly space without any great expenditure of capital.

But the greatest weakness in make-or-buy policy, according to the experts, is living in the past. Manufacturers very often come to an intelligent decision—and then let it stand for years, or even decades. Actually, make-or-buy decisions should be un-

SEAL OF APPROVAL: *One of the crucial steps in the new optical polishing sealing technique for electron tubes developed by the Chatham Electronics Division of Tung-Sol Electric, Inc., Livingston, N.J. In the "Polyoptic" process, the glass bulb is given a concave edge, while the mating stem is polished to a convex surface. The two glass edges fit so exactly that when they are brought into contact, intermolecular attraction locks them together. As a result, they can be sealed permanently at a much lower temperature, which cuts the danger of internal contamination. The process was originated for high-reliability tubes for space electronics but eventually, when automated, should be applicable to industrial electronic equipment where reliability is a prime consideration. Originally conceived two decades ago in France, the process has been applied in that country to tubes for undersea cables that last for ten years and more without failure.*

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der continuous scrutiny by some responsible official or committee. Each situation should be reviewed regularly at least once a year.

If they accept the basic premise that one dollar saved generates as much profit as many more dollars in sales, manufacturers would do well to re-examine their make-or-buy policies. An unintelligent or poorly applied decision by itself is hardly likely to force any company into bankruptcy. But in the coming decade of tough, shifting markets, it could be the straw that breaks the camel's back.

Too Fast, Too Soon

"Look before you leap" is good advice in practically any business situation —and particularly applicable before installing expensive automation equipment. Feasibility studies are almost a must, for the most common error in buying automation equipment is to acquire far more capacity than the operation demands—or can pay for.

One pharmaceutical manufacturer on the West Coast, according to Allen Harrey, president of the Dasol Corp.,

FUEL CELL PROGRESS: *The first practical application of the fuel cell (see* DUN'S REVIEW, *January 1960, page 31) is near realization. Developed for the military by General Electric Company, the portable electric power unit is now undergoing evaluation. Weighing only 30 pounds, it produces as much power as a 55-pound engine-generator set or 80 pounds of batteries. It uses only 72 pounds of gaseous fuel to power a 200-watt, 24-volt field radar unit for a week of continuous operation.*

engineers, found that it used one new and expensive piece of equipment only 30 per cent of the time.

But the Glidden Company, which has diversified into foods, can cite an even more glaring example of over-automation. The company had been burdened with antiquated equipment in an old plant at Elmhurst, L.I. When it moved the plant to Bethlehem, Pa., management gave orders to modernize. The production engineers stayed within sensible bounds on new equipment—except for one lapse. They bought a $50,000 machine to fill packages with dry spices.

On the face of it, the new machine looked like a bargain. It filled 400 packages a minute and was supposed to replace 8 to 10 young ladies. After the machine was completely installed, someone made the devastating discovery that it could package all the company could sell each year in only 200 hours of operation. As a result, it is operated only a few days a month—yet it takes up valuable space, it has to be adapted for each of 30 to 40 different kinds of spices, and there are a number of items, such as stick cinnamon and bay leaves, which still have to be packed by hand.

To add salt to the wound, Glidden pays two dollars more per thousand packages for a special box.

Going overboard on automation can have far more serious consequences than the immediate loss in time and money: Management can be so soured on automation that future proposals to automate may be rejected, to the company's ultimate loss.

Technical Register

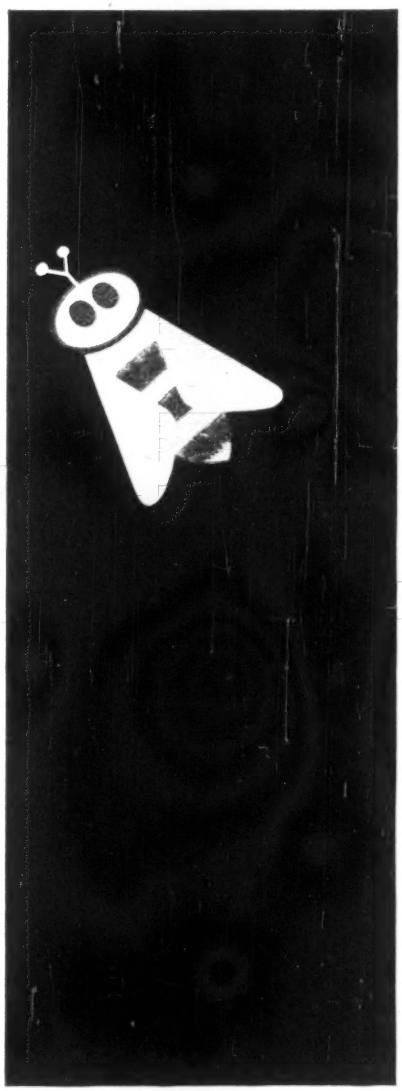
At Hughes Aircraft Company, decisions on reassigning personnel or adding temporary duties are made easier with use of the company's new "professional register" of the special abilities, achievements, and education of its scientific and technical employees.

Among the kinds of decisions the register helps make are:

- Accurate definition of jobs for job description forms
- Assembly of technical teams to work on new projects
- Assignment of personnel to help prepare technical proposals for defense work.

All of the information is on punched cards for rapid, automatic reference.

—M.M.



SURPRISINGLY not all companies in this country use National Vulcanized Fibre in their products.

ONLY about nine-tenths of the sales-minded, cost-conscious manufacturers of electrical apparatus, electronic components and equipment, automobiles, instruments and appliances . . . to name a few.

Why? Because vulcanized fibre is a unique plastic with a combination of money-saving, product-improving properties that no other material has been able to match in 101 years.

The facts about National Vulcanized Fibre would probably surprise you. Why not write for them.

If you can't use information on vulcanized fibre, ask about our Phenolite® Laminated Plastics, Kennett Materials Handling Receptacles, Lestershire Bobbins, or Parsons Fine Papers . . . more products made better by National research.

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Focus on Finance

GERALD M. LOEB

- *Great men build great corporations—and investing in people can be the mark of financial wisdom.*
- *A small down-payment can buy you a house, a car, a trip to Europe—but not one share in a U. S. company.*
- *Debating whether you should "go public"? Take heart from the experience of one who made the plunge.*

"AND finally," said the chairman of the board, "before I ask the president to tell the meeting about last year's sales and earnings, I would not like to sit down without inviting you to join me in a tribute to the thousands of loyal employees without whose devoted help. . . ."

At this point the average shareholder may shift a little in his seat and wonder whether he is going to make the 2:45 out of Grand Central, but he may be missing the most important thing said in the entire course of the annual meeting. It has become routine to say something nice about the people who compose a corporation, but every now and then our attention is sharply called to their real importance. Although our economy has its ups and downs, "people"—and particularly the rare individuals of outstanding drive and energy—are the main reason why in the long run there is always more to the ups than to the downs.

Youth has its day

A good friend who visited my office a few days ago said to me: "I am always bullish on stocks of companies managed by competent young men in new industries." This man, with a long record of successful investment selection, does not ask whether we are in a bull market or a bear market. He is concerned only with who is in charge of his money and how it is being made to grow.

Today as never before young men are making their mark on American industry, usually in the newer fields of technology. It is literally true that in some areas almost no one more than 50 years old can have the necessary educational and technical background to be a leader—there are skills and sciences which did not even exist 30 years ago. But not everyone reaches his prime in early youth, nor does a company have to be in a "growth" industry in order to grow.

There are cases—American Motors is one—where top-quality management can pull a company together, cut away deadwood, develop a clear corporate objective, and show results that are quite as impressive as developing a new and glamorous product. Or a man with great financial talents can work wonders for a company without directly supervising operations, as the late Robert Young did with Alleghany Corp. It is enough to say that great investment opportunities can be found through the correct judgment of people.

In the late 1930's, Joseph H. McNabb, then president of Bell & Howell, made a judgment of this kind about an extraordinary young man named Charles Percy. Percy came from a home economically shattered by the great depression, which had put his father out of a job. As a young schoolboy, Percy had become self-supporting, and later, as a magazine salesman—with a couple of other spare-time occupations—he worked his way up to graduation from high school. At college he supported himself with something to spare by setting up a purchasing agency for various campus supplies.

His first summer job was with Bell & Howell, but the following summer he was offered more than three times as much money by a magazine publisher, whose star salesman he soon became. At this point, McNabb entered the picture. Learning that this young ball of fire had not returned to Bell & Howell, he checked to find out why, and decided that a salary differential of $35 a week should not be a consideration where a man of this quality was concerned. The following summer Percy was back at Bell & Howell, and in 1940, he was graduated from college and joined the company permanently.

Nine years later, McNabb died—and was succeeded as president by 29-year-old Charles Percy. At this point, the $35-a-week "investment in people" that Joseph McNabb had made years before began to pay off in a big way.

Spectacular growth

In 1948, Bell & Howell had sales of $17.6 million, and a net of $1.5 million. The stock that year ranged in price from 3⅝ to 6—between 2.4 times and 3.9 times its net income. In 1958, sales were a little more than $59 million and net income was $3 million. But these figures, though they reveal an impressive growth record, tell only a small part of the story. In 1948, Bell & Howell reported no expenditure on maintenance and repairs, and under $200,000 on depreciation and amortization. In 1958, the aggregate of these two expenses was nearly $2 million—a partial reflection of the company's research and development effort. In terms of the balance sheet, working capital rose from $8 million to $40 million, and gross property from $6 million to nearly $19 million

Unit Costs Go Down When a Townsend Man Helps You Improve Assembly Economy

The blue figure above could be a Townsend Man in your plant applying The Townsend Method to help improve your products, reduce unit costs and speed assembly.

His knowledge of advanced techniques in producing special fasteners and parts and the tools for installing them could be invaluable in the selection, design and proper application of these items to your products and methods.

By use of The Townsend Method he may analyze a particular product and have special parts designed to improve it. Or, he may suggest the use of one of many Townsend fasteners in the assembly. He may also study your entire production line and locate opportunities to improve assembly methods and tools.

Others have effected substantial savings in unit costs by having The Townsend Method applied to their product designs and production lines. To put it to work for you write F. R. Dickenson, President, Townsend Company, Beaver Falls, Pa. There is no obligation.

THE TOWNSEND METHOD

★ Investigate the present methods, special fasteners and small parts used in assembly of your products.

★ Evaluate your design in relation to assembly, unit costs and appearance.

★ Eliminate wasteful, time consuming, costly methods as well as expensive fasteners and parts.

★ Coordinate the design function with project engineering to assure most economical tooling and assembly.

★ Estimate possible savings which can be translated into increased profits for you.

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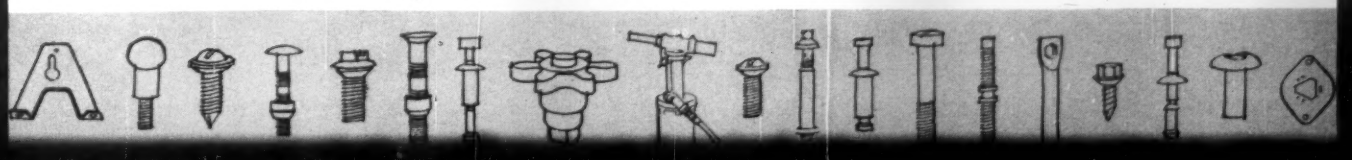

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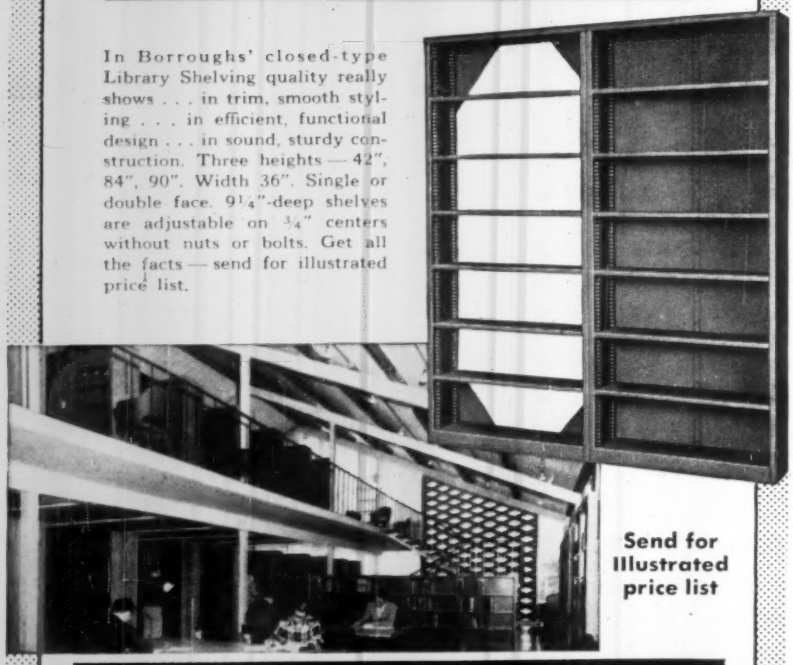

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A SUBSIDIARY OF THE AMERICAN METAL PRODUCTS COMPANY OF DETROIT
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during this same ten-year period.

The wide-swinging pattern of the early postwar years has been replaced by steady growth; sales have risen each year since 1949, and net income each year since 1953. To the stockholders, the greatest bonus of all has been the new vitality and increased stature of their shares in the market. In 1958, the price/earnings ratio was not 2-to-1 or 4-to-1, but as high as 22-to-1; in 1959, the stock soared to a glamorous 29½ times estimated earnings for that year.

It would be excessive to attribute to Charles Percy the whole of Bell & Howell's success story. But any investor who followed the late Joseph McNabb and decided to invest in Charles Percy would have been more right than the industry specialists who were then talking about saturation of the home movie market or the dangers of foreign competition.

Rambler's rise

In 1959, any award for corporate man of the year should have gone to George Romney of American Motors. The men who had the faith to invest in him and his abilities achieved outstanding capital gains, even though automobile manufacturing is not normally thought of as a growth industry and American Motors, pre-Romney, was certainly not considered a growth company. But under Romney's management, earnings have risen from a 30-cents-a-share deficit in the quarter ended September 30, 1957, to a 90-cent profit (fully-taxed) in the June quarter of 1959. No doubt they would have gone higher in 1959 but for the steel strike, and there may very well be a record quarter some time in 1960. The stock has risen from a low of 1⅝ in December, 1956, to a high of 32¼ in November, 1959.

I have known George Romney since he succeeded the late George Mason as president of American Motors, but in this instance I failed to "invest in people" and lost the opportunity of a handsome profit. Instead of assessing him, I tried to assess his product—and sidetracked myself in a maze of my own construction, worrying about his car, his costs, and his competition. I would have done better to ignore the roadability of the Rambler, and concentrate on the ability and drive of George Romney.

Of course, judgment of people cannot altogether supplant judgment of

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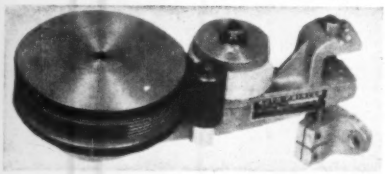

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THE INDUSTRIAL MARKING EQUIPMENT COMPANY, INC.
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facts and figures. Otherwise, I suppose, all security analysts would have to give up their jobs to psychoanalysts. But the history of American industry is studded with the names of great men who have built great corporations.

This is not to belittle the concept of team management, which is valid in many cases—particularly when a company has grown too large for one man to handle. Perhaps General Electric is the outstanding example of a brilliant team effort, and for the occasional or amateur investor, it is attractive because no single man can make or break it.

But even when the group has succeeded the individual, there is still a crying need for individual management. As Thomas Watson, Jr., of IBM said in a 1958 executive memo: "If every employee, and particularly each manager, thinks in terms of 'this is my company' and approaches every situation and decision as if he were the sole owner . . . his actions and decisions will reflect what is best for the company as a whole."

I heartily agree. I believe it is worth a lot of the investor's time to look for the Percys and Romneys and Watsons of the future. Failing that, it is well worth his while to find the large and mature company which is itself "investing in people" by seeking out brilliant young employees and giving them the widest possible freedom to build their own kingdoms within the corporate commonwealth.

After all, the people who pilot your investment are probably the most important single consideration. People go on and on, they reach the height of their powers at different times and regardless of the level of the market, or the price of the stock, or the state of the economy at any given moment.

Curious Credit

Genesco Inc. (formerly General Shoe Corp.) has recently blazed a new trail along the expanding frontiers of personal credit. In a direct mailing, it sent to its 12,000 stockholders a personal credit card which can be used at any Genesco store. This card confers more than the privilege of buying shoes on the cuff. It will enable the happy holder to "buy now, pay later" on Paris models from Bonwit Teller, exclusive millinery from Henri Bendel, or even diamond rings from Tiffany—all Genesco affiliates.

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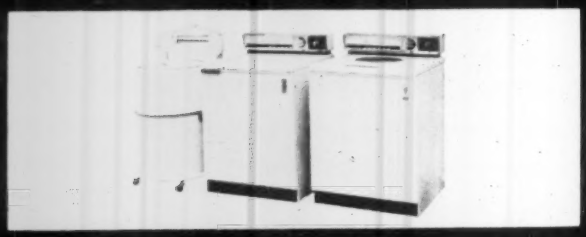

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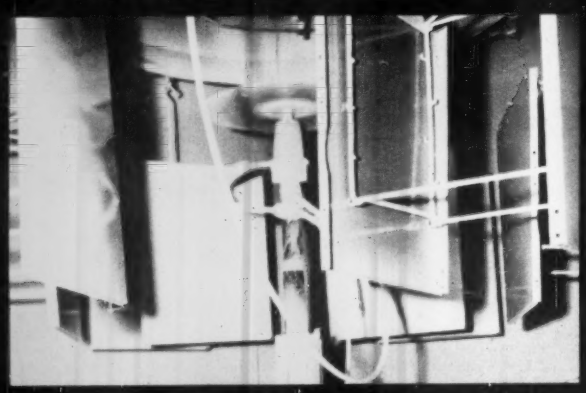


RANSBURG NO. 2 PROCESS

Kelvinator Division of American Motors switched from hand spray to RANSBURG No. 2 PROCESS Electro-Spray to meet increased production schedules . . . improve the quality of the finish . . . and lower finishing costs.

SAVINGS EXCEEDED EXPECTATIONS

Demonstration tests in the Ransburg labs indicated substantial savings in finishing costs, but in actual production, SAVINGS ARE EVEN GREATER than estimated. That's why Kelvinator is now considering RANSBURG Electrostatic Spray Painting for other products of their "white goods" line: Refrigerators . . . Home Freezers . . . Ice Cream Cabinets . . . Electric Ranges, as well as some components.

NO REASON WHY YOU CAN'T DO IT, TOO!

Want to know how Ransburg No. 2 Process can improve the quality of YOUR painted products, and at the same time, cut YOUR paint and labor costs? Write for our No. 2 Process brochure. Or, if your production doesn't justify automatic painting, let us tell you about the new No. 2 Process Electrostatic Hand Gun which can be used in either conveyorized, or non-conveyorized painting.

RANSBURG

RANSBURG
Electro-Coating Corp.
Box 23122, Indianapolis 23, Indiana

The direct mailing was a logical next step from the established practice of many oil companies, who invite all shareholders to take out credit cards on simple application, with no credit check. But it is interesting that when American Express introduced a credit card, the company's sophisticated management applied credit checks not only to stockholders, but also to officers and directors who applied.

Real estate mortgages and installment financing already represent a heavy first call on millions of paychecks. Now we have the credit card —and one may wonder whether the debt of many Americans, especially younger people, does not exceed their assets. This is a curious aspect of capitalism which might have unfavorable results if it ever got out of hand.

Even more curious than the soaring growth of credit on houses, consumer durables, and now non-durable goods and services is the almost complete absence of credit facilities on the shares of our publicly-held leading corporations.

How do we justify the fact that an airline trip to Europe can be had for 10 per cent down and the rest over twenty months, while the stock of the companies that operate the line or manufacture the aircraft have to be bought 90 per cent for cash? The best credit risk in the world is the one form of collateral on which it is really difficult to get credit in America today.

Deciding to Go Public

Recently, an American Management Association group was told that "going public" will be a household phrase by 1975, when some 30,000 businesses now in private hands will have become publicly-owned corporations. Some of the problems and costs of going public have already been discussed in this column. (See DUN'S REVIEW, February 1960, page 87.)

In a Chicago speech, Elmer L. Winter, president of Manpower, Inc., examined the "fears . . . and advantages" of a public offering.

Here is a condensed version of his "seven fears": (1) Will the offering succeed? (2) How will outside stockholders affect my activities? (3) How will I be able to live with outside directors in my company? (4) Won't state and Federal regulations make it almost impossible to have a successful issue? (5) Aren't the costs of

financing prohibitive? (6) Will the public find sufficient depth in management? (7) How will I know if I am getting the right price on the initial sale of part of my stock?

Winter wound up as the happy executive of a publicly-owned company after balancing against his seven fears five potent advantages: (1) Many of his estate and gift tax problems have been settled. (2) He has money outside of his business which will give him security, and an opportunity for investment in other business enterprises. (3) Since part of the new stock issue was sold by the company (as distinct from that sold by stockholders), there are now additional funds for expansion and growth. He will be relieved, to that extent, of the high interest charges attached to short-term borrowing. (4) Company executives and employees may now acquire stock in the corporation, thus developing a greater interest in its growth. (5) The company now has a higher status in the business community. It has, in effect, arrived.

And in the great majority of cases, as in Manpower, Inc., the attractions heavily outweigh the drawbacks.

More on Annual Reports

Stockholders of American Can may have been surprised to receive their annual report in what, at first glance, looked like a can a couple of inches in diameter and about three-quarters of a foot long. It turned out to be an adaptation of American Can's "String-Pul" container for biscuit dough. For many years paper companies have printed annual reports on their own product—carefully labeled as such—and from time to time there has been a more venturesome effort, such as using metal foil on the cover of an aluminum manufacturer's report. But American Can's new approach is a stand-out. The mailing also had a public-relations value, so that all in all it can be considered an original and successful gambit.

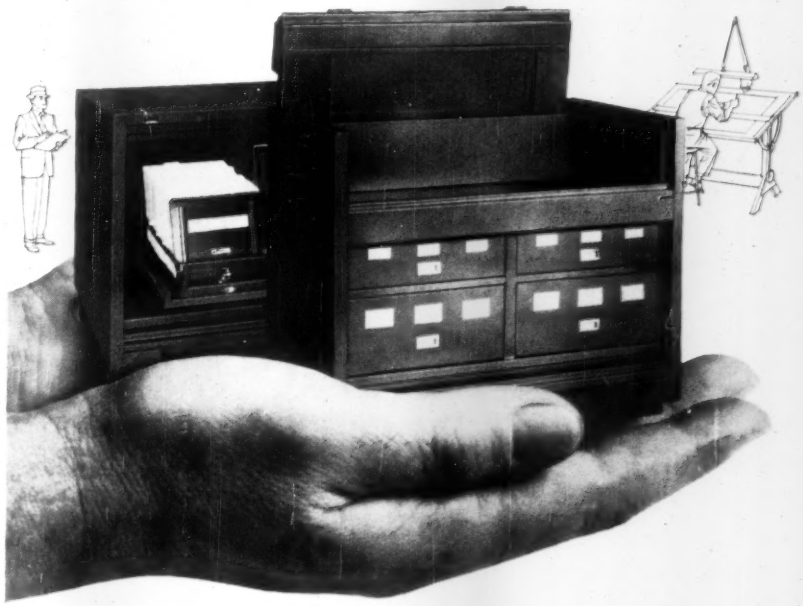
We wonder where it will lead. We won't mind receiving our American Airlines report by air mail or our Western Union report by telegram, but we are wondering whether we can expect a card full of holes from IBM. Eastman Kodak might some day send us something photographic —and we may even end up with some key figures etched on a Steuben glass ash tray from Corning. END

Custom Built Business Equipment Improves All Office Procedures

NO TWO BUSINESSES ARE ALIKE. Your business has operating methods, a personality and individuality all its own. So doesn't it make good sense to invest in business equipment designed to fit your particular operation . . . rather than having to adjust your operation to fit equipment that happens to be available?

LeFebure custom-builds sorting, cash handling, mail handling, filing, record keeping and accounting equipment for industry, commerce and institutions. LeFebure custom-building assures you greater efficiency . . . full capacity with easy accessibility . . . utilization of all space . . . solid strength and durability . . . insulated housing for protection of all contents . . . and complete operator comfort.

A careful analysis of standard units frequently shows the real savings that can be effected with custom designed equipment. Perhaps there's a possibility in your office. Let's find out.



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International Markets

ALEXANDER O. STANLEY

GROUSING sessions have been a weekly feature of the Washington scene lately as U.S. industry leaders have complained to Government export aides about the overseas areas of resistance to U.S. goods.

Now management has a chance to look at the other side of the coin: the overseas buyers' point of view on what's wrong with American marketing methods abroad.

- ✓ *Foreign buyers spell out some do's and don'ts of successful overseas marketing.*
- ✓ *U.S. companies to finance installment sales—American-style—in England and West Germany.*
- ✓ *Gold outflow slows down, but heavy commitments to foreign holders spur export drive.*
- ✓ *New import trends and practices will bear watching.*

This was the central theme of an around-the-world poll of potential buyers recently conducted by commercial officers in widely scattered American Foreign Service posts. Interviewed were local importers, agents, and users of U.S. products.

What the spot survey uncovered should make informative and provocative reading for American management:

There is no lack of interest abroad in U.S. goods. In fact, overseas consumers appreciate the high quality, superior performance, and excellent design of American products. What's more, they are often willing to pay a premium to get them.

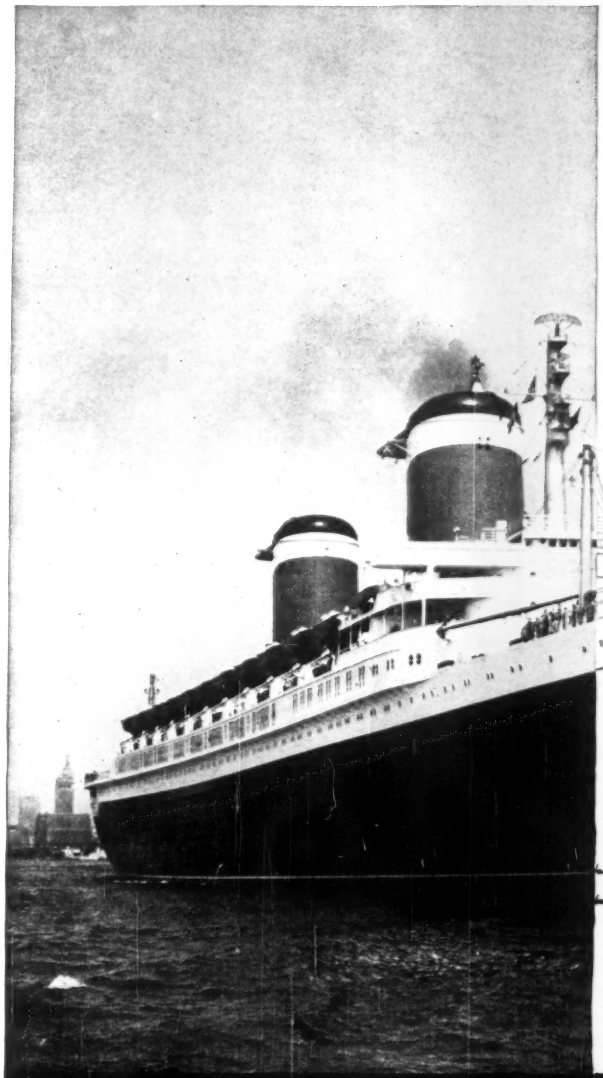
But U.S. management, and its methods of doing business abroad, are considered too casual, too indifferent. American companies, say the foreign critics, should apply their selling and marketing skills to foreign markets, as they do to home markets.

Out of a long list of irritants, the following seem to be the major frustrations that fray the nerves and try the patience of overseas business men handling made-in-U.S.A. goods:

- American suppliers are inclined to treat the overseas organization as a "poor relation."
- When business is tough at home, U.S. management is willing to "go international"—but when business is good at home, export markets are ignored.
- When surpluses pile up, when post-season inventories mount, or when a bad batch of products comes off the assembly line, some companies are quick to dump these domestically indigestible goods abroad. They don't seem to care about the damage done to the good will for U.S. brands that local representatives have painstakingly built up.
- When it comes to selecting local distributors or agents, the fetish of bigness prevails. Too many U.S. companies seek out the large, solid—and in some cases, stolid—commercial outlets, ignoring smaller, more aggressive sales channels. Then they complain that their products get lost in the welter of lines carried.
- Some lines die on the vine because U.S. management has only remote and tenuous contact with overseas sales personnel. And if the busy American executive does finally call on his dealers abroad, his trip is usually hurried and his contribution meager.
- Americans have a distorted view of foreign purchasing power. Low wage scales don't necessarily mean there are no sales to be made. Market tests, not statistical indices, are suggested as the gage of market potential, whatever the product's price. In some areas a product can be sold on the basis of its novelty alone. Then too, the superior fountain pen—like the superior piece of industrial equipment—can find a market, no matter what the nation's "purchasing power." The market may be limited in scope at first, but lots of limited markets in total create mass sales.
- The credit terms U.S. companies offer rank a poor second to the more liberal accommodations that our overseas competitors give—and give readily. Some foreign distributors have to tie up their capital in slow-moving (both in and out) and varied inventories, and short-term credits tend to cripple dealers who need broad credit in order to amplify the narrow capital funds they usually earmark for day-to-day expenses.

Translating or transwriting instructions, recipes, and the like is another "must" numerous U.S. companies shrug off, leaving the foreign consumer in a state of total confusion about how to use an American product. When, for instance, is a "cupful" not a cupful? This is a crucial point the foreign housewife must often decide for herself in using American food preparations.

And the overseas buyer can really get lost if, drawing on a limited fund of English, he tries to translate instructions and diagrams for equipment and tools from a coding in English to a workable formula in Spanish, French, or whatever. One large foreign user of U.S. machinery recently complained that, try as he would, he couldn't get translated instructions



You wouldn't build half a ship . . .

Like a ship, a business transaction isn't worth much until it's completed . . . when your invoice is paid. After you've made the sale and the shipment, AMERICAN CREDIT INSURANCE helps you finish the job . . . *completes* your profit cycle . . . *protects* your capital investment in accounts receivable.

The one thing that permits *deeper* market penetration is security . . . the security of commercial credit insurance. AMERICAN CREDIT INSURANCE facilitates sales progress . . . helps you *add more* new customers, *sell more* to present customers . . . by elevating lines of credit with security and stability.

Is *your* credit insurance coverage up-to-date?

Extend your market penetration . . . your profit protection . . . with

American Credit Insurance

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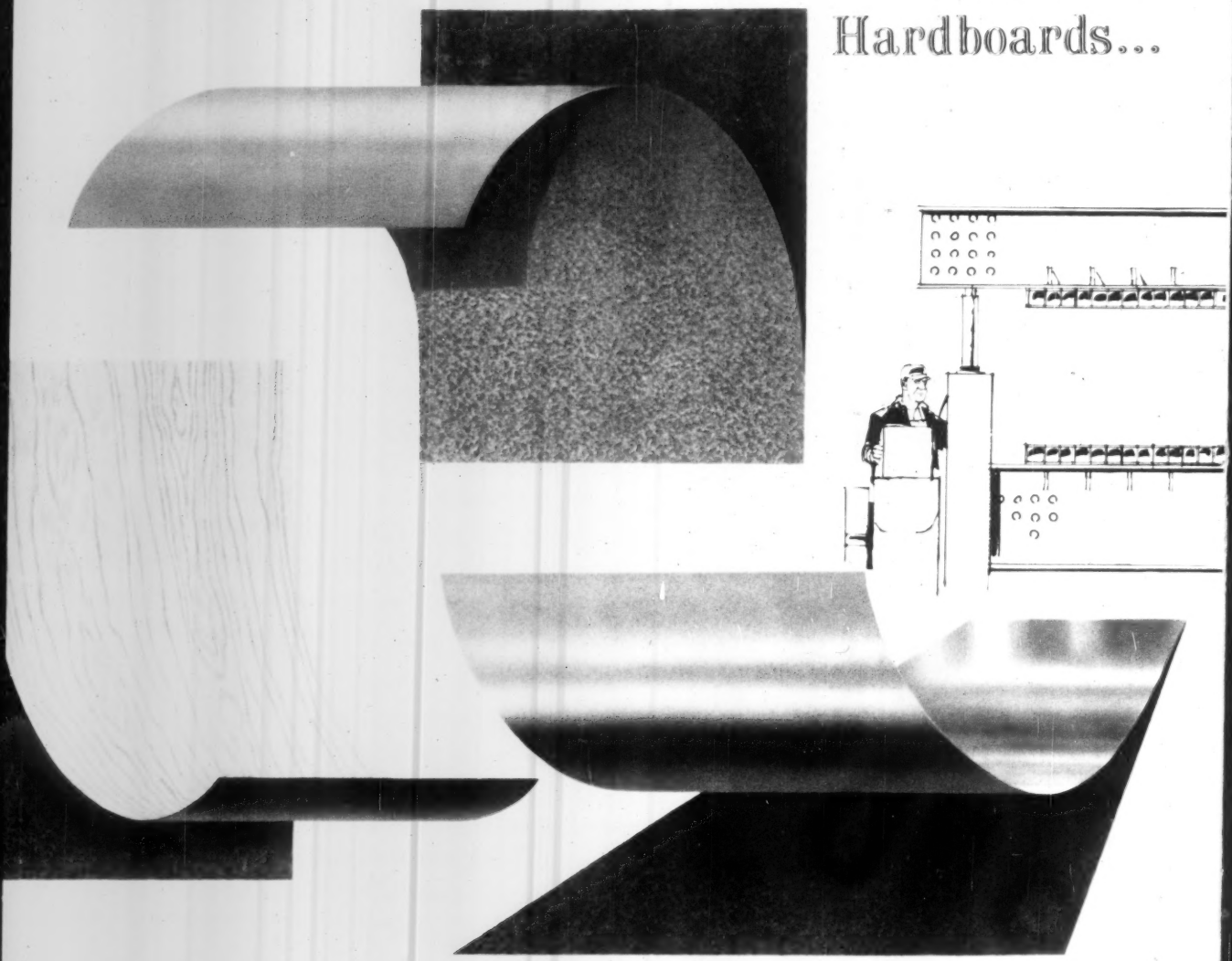
Call your insurance agent . . . or our local office. Send for informative booklet on the many sound advantages of modern credit insurance. Write AMERICAN CREDIT INDEMNITY COMPANY of New York, Dept. 50, 300 St. Paul Place, Baltimore 2, Maryland.

you can do just about anything with Masonite® Hardboards...



for example The uniform surface of Masonite hardboard makes it ideal for laminating—as the outer material, or a core between layers—bonding beautifully with wood, metal, foils, plastic, leathers, fabrics. Its consistently smooth surface, dimensional stability and hardness—from piece to piece, carload to carload—make Masonite hardboards reliable from one job to another.

in fact Masonite offers you a complete choice of thicknesses, densities, textures and patterns. Wonderful workability. Extreme resistance to impact, moisture, abrasion. Whatever your design or production need, Masonite has the hardboard to do the job.

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Please send latest design and production information on Masonite panel products.

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from his supplier—even though the equipment he bought cost more than $100,000. He noted that foreign companies usually provide instructions in four languages on all facets of construction, maintenance, and operation, whether it is industrial machinery or a simple household gadget.

● Small orders seem to be a bane to U.S. companies, even though repeat business may eventually build up a sizable volume of sales. To some extent, tight capital often precludes heavy commitments by foreign buyers. But sometimes they prefer to give small orders so that they can test consumer response.

This is especially true of new or unique products, which may gain local acceptance only slowly. European companies, unlike U.S. corporations, take the long view, and will write up small orders of even $100 to build up an account.

● Some U.S. companies produce large lots of special items, then discontinue them just when a real market has been developed abroad—a tendency foreign customers naturally find exasperating.

● And not the least of our trade sins is our frequent lack of courtesy in failing to answer letters of inquiry, leaving the dealer abroad uncertain as to whether his letter was lost in the mails—or the wastebasket.

Asked to suggest ways for us to expand exports, the overseas customers queried gave this broad array of helpful hints to export aspirants:

● Intensify advertising campaigns, emphasizing brand names, quality, novelty, and performance.

● Keep in close personal contact with overseas distributors and agents.

● Reply promptly to inquiries—with letters, not just literature.

● Quote prices in the local currency, c.i.f. (cost, insurance, freight), not f.o.b.

● Try to cut down on distribution and middleman costs to reduce prices.

● Print instructions in the local language.

● Examine the effectiveness of present overseas sales outlets—and keep checking on them.

● Provide more technical assistance and better service to foreign distributors and users.

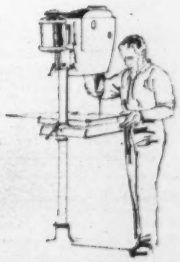
● Tailor products to fit local consumer demands and tastes.

● Visit agencies more frequently to push sales, set up more sales offices

...and your fabricator will help you in all these ways:

ENGINEERING

Your Masonite Fabricator helps fit the product to your picture. Wherever you now use flat or curved sheets of metal or wood, he'll point the way to substantial savings on material... tremendous savings on tooling!

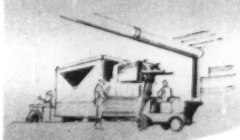


FABRICATING

Your Masonite Fabricator has complete facilities for laminating, die-cutting, punching, cutting, routing, forming, bending. He provides other services such as custom-finishing, wood-graining, silk-screening —even partial assembly!

WAREHOUSING

No inventory problems. Your Masonite Fabricator will deliver ready-for-use parts in any number your job requires— once a week, once a month, you name it.



To save production space, as well as manufacturing and assembling time, contact the nearest address below.

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What's your office problem? Whether it's to cut office costs, save space, make the individual office worker more efficient or improve office appearance, the new 248-page Shaw-Walker Office Guide can help you.

It also pictures, describes and prices 5000 items—Clutter-Proof desks; Correct seating chairs; Filing cabinets in 347 styles and models; Simplified filing systems; Fireproof record keeping equipment; Automation accessories. A gold mine of *ideas*.

FREE *to office and purchasing executives:* Request on business letterhead or phone your Shaw-Walker representative.

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What Does Your Business Front Say About Your Company . . . Your Products . . . Your Service? The sign on your building is your "business card" to potential customers. No matter what you make or sell—a good front is an important business asset . . . and Plasticles Sign Letters give your business distinctive, personalized identification that will be *looked up to* and remembered.

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REPRESENTATIVES IN PRINCIPAL CITIES

abroad. Or pick out small concerns to act as distributors, giving them exclusive territory, quick service, and strong backing.

- Concentrate on lower-priced items at first. Search the company line for products new to the market you want to penetrate, or competitive in price to items manufactured there. With these, you can establish the company name locally and then gradually expand your line.
- Overcome geographic disadvantages in coping with overseas competitors by keeping trained technicians on tap to service the equipment sold.
- If possible, send company technicians on periodic trips abroad to advise buyers on installation and proper maintenance—and also to see what's new in technology overseas, so that you can keep abreast of foreign competition.

All these pointers underscore the theme that it is the methodical—not the casual—approach that yields export profits.

Consumer Credit Overseas

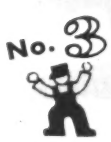
It will soon be a pound or a few Deutschmarks down and the balance on easy-to-pay terms when American-style installment sales go into effect in England and West Germany. Under the aegis of the C.I.T. Financial Corp. and the American Express Company, the new overseas consumer and industrial financing operation will start with a capital fund of $5 million, should play an important role in internationalizing U. S. commercial operations.

Gold Stays Home

Some headway is being made in stemming the gold outflow from the United States. The first quarter of 1960 showed a dip of only $48 million in our gold stocks, to a level of $19.4 billion. This is a solid improvement over the equivalent periods of 1959 and 1958, when the quarterly average outflow was $409 million.

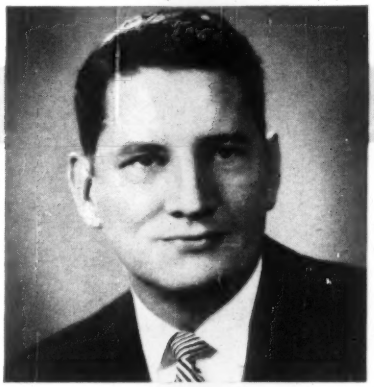
But if the trend is comforting, the fact that foreign gold commitments almost equal the entire U.S. gold stock is enough to keep the Treasury on edge.

This explains the strong support the Administration is giving to the national export expansion program. Fresh impetus to this project is ex-



in a series of washroom survey comments from "SBS soap counselors"

We showed them how to clean - disinfect - sanitize - deodorize in one money-saving operation!



Edward T. McNamara, Jr.

SBS soap counselor, has helped many plants in the Southwest improve their wash-up and clean-up programs. Here's an excerpt from his account of a survey at a synthetic rubber plant:

"We found washroom housekeeping costs way up . . . for the usual reasons. Maintenance men were using slow-acting scrub soaps, scouring powder and disinfectants. These single-purpose products required lots of elbow grease and needless duplication of effort.

"Plant Management was pleasantly surprised when we showed them how easily a single product, new SBS 50 handles *ALL* of these washroom chores *in less than half the time!*" SBS 50 cleans - sanitizes - disinfects - deodorizes in *1 economical operation!* Just one swish of a mop or washcloth with SBS 50 cleans soils from walls, floors, fixtures — all the places where germs breed. No scrub, no rinse, no waste motion! SBS 50 is especially formulated to simplify industry's housekeeping chores. Its effective 4-way action reduces maintenance costs.

Money-saving suggestions like this *begin* with OPERATION PINPOINT—a thought-provoking presentation filled with facts about skin hygiene and washroom maintenance. The SBS soap counselor serving your area can pinpoint the right soap to do every skin cleansing job best and at lowest cost in your plant. Let him show you OPERATION PINPOINT . . . just call your nearest SBS office, collect.

the washword of industry

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CANADA: Chemical By-Products, Ltd., Toronto, Ontario

pected to result from the recently appointed Export Expansion Committee activated by U.S. Commerce Secretary Mueller. The committee, headed by Leonard F. McCollum, who in business life is president of the Continental Oil Company, comprises many topflight U.S. industrial leaders. The 33 field offices of the Department of Commerce will start initial organizational activities, with emphasis on exploring ways to create export interest among management groups that have not been active in overseas markets. So if you are intrigued by the export possibilities of your products, get in touch with the nearest office of the Commerce Department or write to: Paul H. Brent, Executive Secretary, Export Expansion Committee, Room 5527, U.S. Department of Commerce, Washington 25, D.C.

Competition, Fair and Foul

Some new imports may further roil our business circles. Brazilian Volkswagens of the light panel variety may be expected soon on U.S. auto rows. Manufactured in the German company's São Paulo plant, this Latin station wagon—100 per cent Brazilian-made and 91 per cent Brazilian material—marks a first in Brazilian automotive exports to the U.S. Interestingly enough, the price will be the same as the West German product.

India has sent a six-man trade mission here to drum up markets for a broad range of metal products, including stainless steel cutlery. Other Indian entries for the U.S. consumer dollar include sewing machines, bicycles, scales, builders' hardware, printing equipment, musical instruments, footwear, and—to give a further headache to auto industry suppliers—auto parts.

These, of course, are legitimate trade seekers. Not so the Taiwan book pirates who are flooding our campuses with cheap reproductions of American text books. They peddle by mail or hire button-pushing student salesmen. Ignoring copyright controls—they haven't signed the International Convention—sharp operators on Taiwan use offset presses to churn out pirated texts, picking the pockets not only of publishers but of authors as well. It is practices like this that put a dent in the Administration's efforts to defend and develop a realistic import program. END

Ideas at Work

- *Sharing the fruits of productivity*
- *High school students ran the show*
- *Secretaries at school—on their own time*

Group Incentive Plan Pays Off

INCENTIVE PAY: *Hourly workers at Carborundum Company's Coated Abrasive Division look over checks fattened by incentive pay. The division's 480 workers picked up an additional $305,608 during 1959 for their share of stepped-up production efficiency. Workers earned between $600 and $800 extra last year.*

How do you motivate a workforce to care enough about output and efficiency to do something about it—something that will show up in black ink on the P&L statement?

By facing this question realistically, using some imagination, and patiently hammering out a plan with the union, the Carborundum Company, Niagara Falls, N.Y., has devised and put into practice a system that motivated employees to cut $750,000 from time and materials costs in a sixteen-month period. About 45 per cent of the savings, or $340,000, went straight to company profit.

The plan has stimulated employees to fresh, imaginative ways of thinking about their jobs and work methods. It has produced some ingenious ways of getting more and better production for less material and labor costs. And it has created a healthy impatience with bad job habits and sloppy workmanship. Altogether, the plan has been so successful that Carborundum has installed similar incentives in three other divisions.

For a number of years, production losses at Carborundum Company's Abrasives Division in Niagara Falls had reached seven figures annually. The company had tried to correct the situation by a variety of educational and training programs. It had secured an improvement factor clause in the labor contract which committed the workers to justify the annual improvement increase in wages by an equivalent productivity increase.

But despite an obvious gain in union and employee understanding of the problem, production losses stayed high.

For two years, specially established union and company committees worked to develop a group incentive plan for the division. The program they worked out, which went into effect late in 1958, made 1957 performance—in terms of ratios of labor cost and material cost to value of production—the benchmark for measuring production efficiency. Fifty-five per cent of any savings resulting from improvement of the ratios would go to the employees; 45 per cent would go to the company.

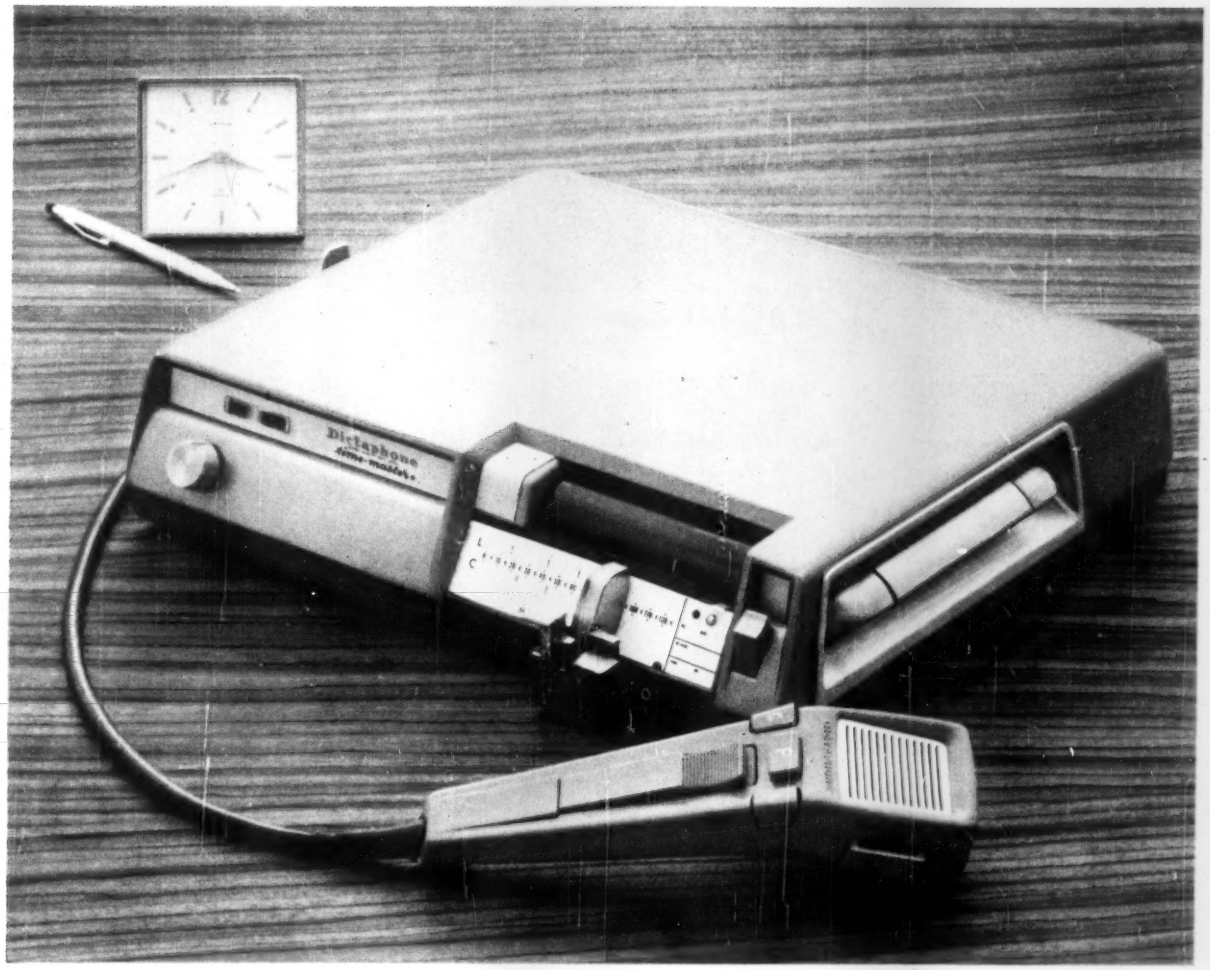
Production committees, each consisting of two management and two employee representatives, were set up in every department, under an overall division committee consisting of four management men and four members selected by employees. These committees concentrated on better use of materials and manpower.

Two typical ideas that produced savings: Employees devised a more efficient method for slitting rolls, and maintenance workers suggested making certain repairs in the division shop instead of in another plant.

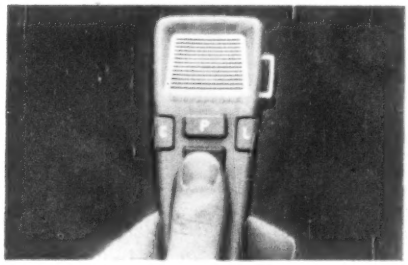
Divisional performance figures, which determine incentive pay, are posted monthly on plant bulletin boards. They have shown an impressive record: Since the plan went into effect, hourly-paid employees have averaged better than 30 cents an hour incentive pay.

Just as important, says Carborundum management, have been the indirect benefits in improved labor-management relations. As evidence, it

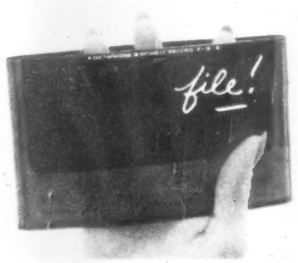
continued on page 177



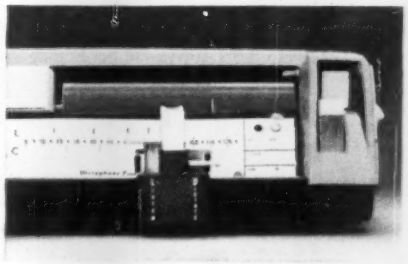
This is the dictating machine with sound you can see.



All controls are on the mike. Four clearly marked buttons control the whole dictating procedure. It couldn't be simpler. Nothing distracts. Since it's virtually automatic, you concentrate on what you say. You get more work done in less time with less effort. And that's precisely what a TIME-MASTER is designed for.



The sound you can see. The heart of the Dictaphone TIME-MASTER is the exclusive Dictabelt. Unlike invisible recording media, this ingenious dictating medium lets you *see* your place . . . play dictation back in seconds. You can't erase it accidentally. And the inexpensive, single-use Dictabelt provides unmistakable clarity.



Marks corrections electrically. If you want to re-phrase a sentence, press a button on the mike. The exact position of your correction is marked for your secretary. See for yourself how much time you and your secretary can save with the TIME-MASTER. Today, call your nearest Dictaphone office for a demonstration.

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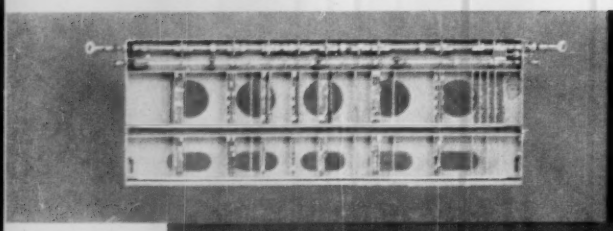
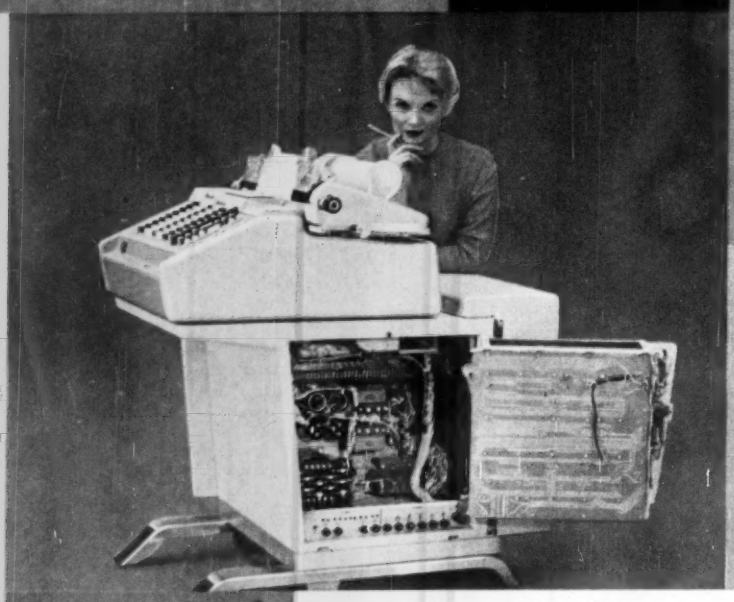
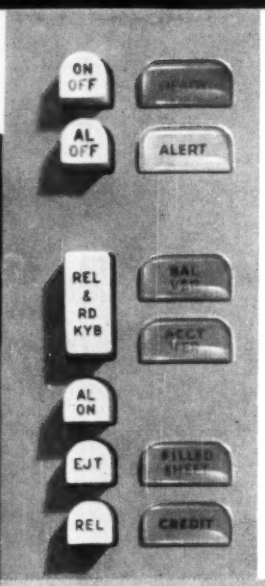
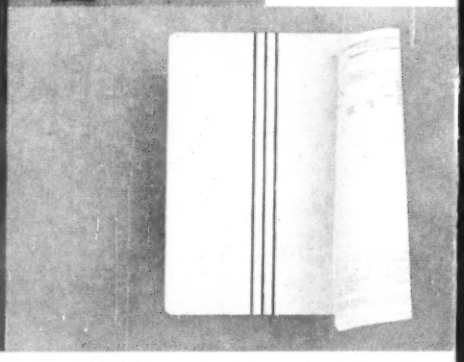
Interchangeable programming panels



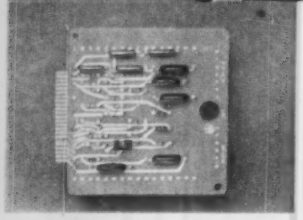




Complete communication signals



Magnetic memory stripes on forms



Printed circuits

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Here's a look at the major advantages that make Burroughs F-4200 Electronic Accounting Machine the most advanced of its kind—one that will work for you as no other of its size and price can: ✱ **PRINTED CIRCUITS** that give you reliability in compact form, an example of the F-4200's advanced electronic techniques perfected during Burroughs research on ultra sophisticated defense projects (computers for Atlas, SAGE, etc.). ✱ **AN ABILITY TO "READ"** —from data stored on thin magnetic stripes on the back of ledger cards—vital instructions and information such as the old balance and the account number. ✱ **INTERCHANGEABLE CONTROL PANELS** that offer you unlimited programming capacity (and can be readily interchanged by your own operators). ✱ **COMPLETE OPERATOR COMMUNICATION SIGNALS** —specific identification of information needed to handle special situations.

Burroughs—TM

OPTIONAL: Burroughs Automatic Reader operates with the F-4200 to simplify accounting still further! It automatically runs trial balances, transfers balances to new forms, posts fixed items. For a look at the F-4200 and Automatic Reader in action, call our nearby branch office. Or write Burroughs Corporation, Detroit 32, Michigan.

Burroughs Corporation

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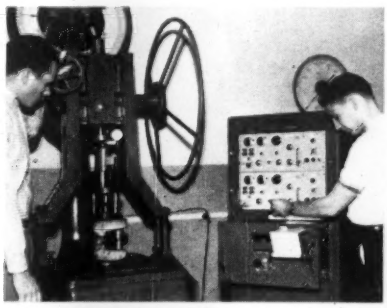
"NEW DIMENSIONS / in electronics and data processing systems"

continued from page 172

points to the fact that its current program has been put into effect without any serious labor difficulties, despite past experience of worker resistance to introduction of new machinery and equipment. One reason: The incentive plan provides that when the company installs new equipment costing $5,000 or more, half the actual labor and/or material savings are credited to the group incentive.

Bosses for a Day



JUNIOR MANAGEMENT: *High-school senior Dave Harton, above, quotes price of lockwashers to a customer as Robert Little, general sales manager of industrial fasteners, looks on. Lyle Davis and Roger Limbach, top right, test coil wire under stress. Dan Appleby, right, interviews Jim Eckstein, an Ohio University student seeking summer employment at Reliance. The boys generally worked in pairs.*

A new twist in community relations was in evidence recently in Massillon, Ohio, when a group of high school seniors marched into the Reliance Division of Eaton Manufacturing Company and took over for a day.

The "Senior Day" at Reliance was aimed at giving selected high school seniors a real idea of how management works, at providing a stimulating educational experience, and at fostering public understanding of management's views.

Massillon school officials screened 233 senior boys at Washington High School to pick 28 whose abilities seemed most closely akin to those required in management positions.

From 8:30 A.M. until 3:30 P.M., the boys interviewed job applicants, and requisitioned materials, and inspected shop operations. One team even took part in an actual management-labor grievance session.

Says Paul Miller, Reliance general manager, "They came as close to running the business as possible."

Then the boys got together and questioned Reliance Division management on a host of company practices and problems—problems most of them had never known existed. They came up with such questions as: "How accurate are your inventories?" "What equipment are you now planning to replace?" "Why are salaries paid by the home office when the factory payroll is paid out of Massillon?"

Reliance is making plans for a repeat "Senior Day" next year.

Secretarial Skills

Better communications mean better business, and one of the key people in most of management's spoken and written communications is the secretary.

With this thought in mind, Weirton Steel Company last fall set up a special voluntary Secretarial Training Program under the company's Education and Training department.

Actually, it was in a sense the sec-

Hushed and Smooth

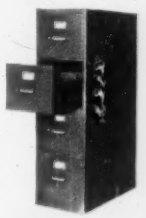
Drawers, Doors

ROLL ON NYLON

In These H-O-N Products

Now, on H-O-N products, the drawers and doors move quietly on nylon rollers. Noise is greatly dampened; long wear is greatly increased. H-O-N has discovered the right nylon formula for the job.

Hushed drawers are an actual fact on the H-O-N Suspension file lines. A sturdy cradle moves on 10 nylon rollers to achieve quiet operation.

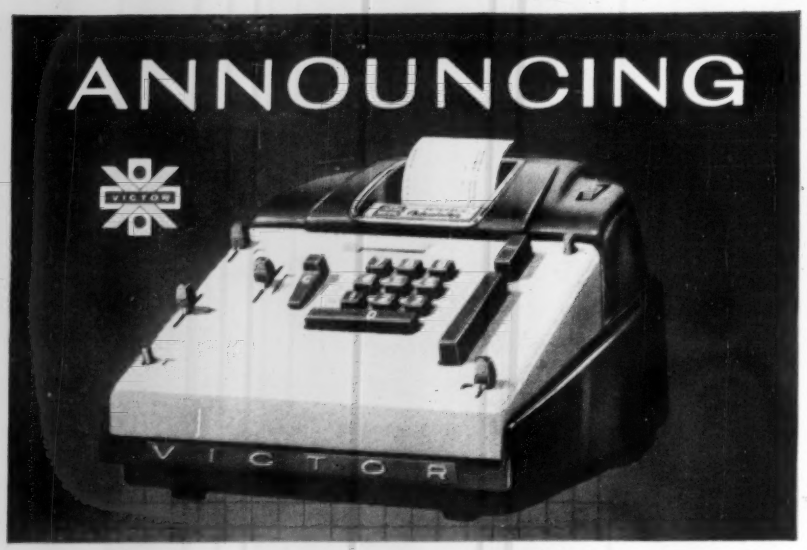


Hushed doors are an actual fact on H-O-N 30 and 48 series bookcases. Glass or steel you get finger tip quiet action with the nylon roller track.

Hushed drawers are an actual fact on H-O-N desks. Nylon rollers and vibration dampened pedestals assure quietness.

H-O-N OFFICE EQUIPMENT

THE H-O-N CO., MUSCATINE, IOWA



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BACK TO SCHOOL: *Secretaries taking voluntary skills course at Weirton Steel discuss business English with Dr. George Anderson of the University of Pittsburgh.*

retaries' own idea. Richard Holingbaugh, superintendent of training, reports that requests from secretaries "triggered off the course to improve standards of workmanship."

Two separate 1½-hour classes are held each Thursday evening for the 103 enrolled secretarial employees at the Weirton, West Va., Community Center. Subjects covered include telephone and typing techniques, filing systems, company forms, principles of human relations, and business English. The course is voluntary, and secretaries attend on their own time one evening a week for seven months.

Back to Work

Cleaning up each day's backlog of paperwork was a major problem for the Preferred Risk Mutual Insurance Company of Des Moines, Iowa, until the company put former employees back to work on a part-time basis. A four-hour clerical night shift was organized, using experienced women who had quit full-time jobs with the company to become mothers. Turnover and absenteeism, incidentally, are lower than on the day shift.

Products Serve Employees

Streamlined cafeteria operations, plus more word-of-mouth product promotion by employees, resulted when Raytheon Manufacturing Company equipped cafeterias with its own microwave ovens for fast preparation of piping hot meals.

Individual frozen servings supplied by a central commissary are defrosted overnight, heated and served almost instantly, eliminating the need for kitchens, steam tables, and the like.

—J.R.M.

Capital Views & Previews

PAUL WOOTON

Ike's right-hand man in the Senate:

a portrait of Everett McKinley Dirksen

EVERETT McKinley Dirksen, minority leader of the U.S. Senate, describes himself as a garden-variety Republican who believes in the Constitution, the Bill of Rights, and the free enterprise system, and who wants to see that our children and our grandchildren have "a full, fair, and decent chance to enjoy benefits comparable to those we have had in this generation."

As the official spokesman for the President in the Senate, Dirksen accepts any challenge thrown down by critics of the defense program. He says the umbrella of military strength about which Mr. Eisenhower talks is all that the President claims it to be—great arsenals of powerful weapons, Air Force bombers deployed the world over, powerful nuclear devices, new generations of missiles, an industrial system unmatched on earth—all supported by a vigorous people determined to remain free.

Many half-truths are ventilated without getting the whole story before the people, Dirksen complains. "National security is such a delicate thing," he emphasizes, "that harm is done at home and abroad unless every aspect of the matter is presented in proper and balanced context." Dirksen observes that "it is easy to make charges on the Senate floor. The next day they are in the headlines 10,000 miles away."

He asks the critics: "Do you think for one minute the present Commander-in-Chief is not taking into account any and all military developments? For 41 years he has concentrated his attention on the defense and security of his country."

A plea for discretion

Criticism in the security field, the Senator warns, calls for some restraint. The peril never was greater, yet we carelessly lay everything out for the world to see. "It distresses me no end," says Dirksen, "when it is charged that the Commander-in-Chief puts money above survival."

His 26 years in the House of Representatives and the Senate have made

NOW HEAR THIS: *The Senator scores at meeting of the Kefauver subcommittee.*

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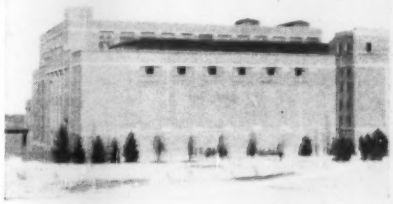

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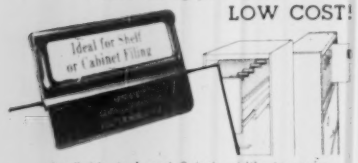

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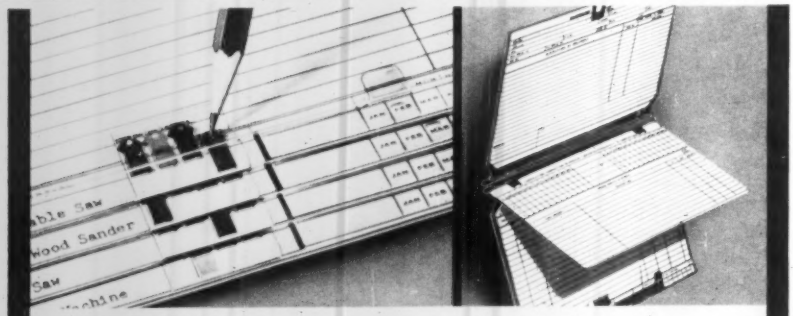

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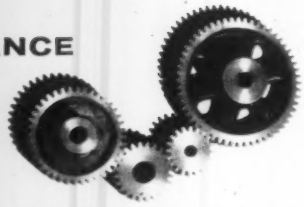

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Dirksen wary of snap judgments. He thinks Woodrow Wilson was about right when he said that one cool judgment is worth a thousand hasty ones—and that any judgment should supply light, not heat. As a result, Dirksen's years in Congress have been singularly free of acrimony.

From the beginning of his career, hard work and the use of reason have helped Dirksen overcome one of his major handicaps—lack of money. As a student at the University of Minnesota, he had to work 29 nights a month as a clerk in the classified advertising department of The Minneapolis Tribune. He earned only enough to keep soul and body together, but he managed to finish college.

First days in politics

After returning to Pekin, Ill., his home town, Dirksen entered politics and was the youngest man ever elected to the City Council. This encouraged him to run for Congress. The incumbent was a man of means. Dirksen was still impecunious, and only one newspaper—a weekly—supported his cause. He lost the primary the first time he tried, but two years later he was successful and represented the 18th Illinois district in the House of Representatives for eight terms.

In 1950, he ran for the Senate and was elected. He won re-election in 1956 and became minority leader in January 1959, when Senator William Knowland retired.

The Senator has an enchanting tongue and is noted for his oratorical flights. In a well-remembered speech, he once described Lincoln as "an incomparable crusader, the magnificent missionary with incandescent conviction, unflinching zeal, invincible logic, and with an unfailing sense of right and wrong—the man from the hallowed prairies of Illinois, where his brooding spirit still lives."

Dirksen is particularly proud of two accomplishments in his career as a legislator. He secured a Federal charter for the Boys' Clubs of America, and few Federal charters are granted these days. But since the good the Boys' Clubs accomplish is offset to a degree by obscene literature, he led the movement which resulted in House passage of the bill banning indecent material from the mails.

The minority leader is also a champion of the private drug industry, and has not hesitated to cross swords with Sen. Estes Kefauver, chairman of the

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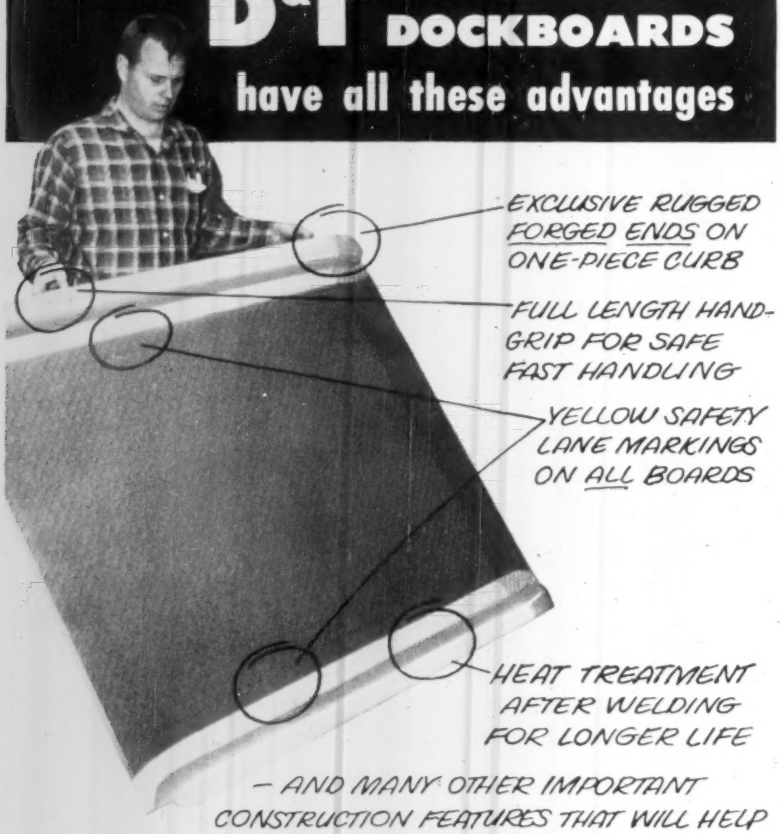
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anti-trust and monopoly subcommittee. Some of the Kefauver witnesses in the recent drug industry hearings made the headlines, but Dirksen claims that does not mean they are true experts in the field, and he has put on record the comments of outstanding doctors on the "tremendous amount of research by the private drug industry without grants of public funds."

Legislative proposals that might provide an opening for socialized medicine find no favor with him. He takes issue with proposals that Social Security medical benefits for retired people should be provided "at the expense of the 90 millions in the population who are producing goods and rearing families." If the Federal Government assumes such responsibilities, the Senator says many will no longer attempt to meet these obligations themselves.

Dirksen makes frequent use of anecdotes to spice his opinions. When Sen. Stuart Symington charged that the American people are being "enticed down the trail of insecurity by the issuance of misinformation about our deterrent power," the minority leader told how a critic of Lincoln compared his conduct of the Civil War to the man who climbed trees to get rid of annoying woodpeckers. The tree climber admitted that he could not catch the culprits—but he could give them the fright of their lives.

Confidence well placed

Dirksen thinks the Russians realize, if Symington does not, that the potential of our defense program can give more than a scare. "The man in the White House," says Dirksen, "was not selected by General Marshall and President Roosevelt to conduct the world's greatest military effort without their knowing that he had the capacity to handle it successfully." Dirksen holds firmly that Mr. Eisenhower's successful conduct of that war qualifies him to administer our present defense effort.

He points out that when he was an army private in World War I, he too thought he knew better ways to run the war. And he cites the many times when men with little military background or qualities of leadership challenged the programs of Washington, Lincoln, Grant, and Pershing. They are remembered, Dirksen notes, only as examples of how wrong the critics can be. END

Sales & Distribution

- *What—and how—do you pay your salesmen? Companies re-examine their sales compensation.*
- *Manufacturers spend $16 billion on packaging but continue the mistakes that lose sales.*

Sales Force Compensation

How to compensate the field sales force has long been one of business's thornier problems. It is an especially nettlesome one at the present time, when many companies are making major changes in the organization of their sales forces. Particularly in large companies, the movement toward tighter control of the field sales force is frequently bringing together groups of salesmen who are paid by different methods.

A recent survey made by Barrington Associates, New York, among 25 companies with sizable sales forces showed that in only six were the top sales executives satisfied with their present plans. Of the other nineteen, four were already in the process of making major changes in the methods of compensating salesmen. The remainder, who described their plans as unsatisfactory, listed as specific problems:

- Windfall compensation from commissions, bearing little relation to the effort salesmen expend
- The failure of present plans to stimulate extra effort when it is needed for special market drives
- The lack of flexibility in present plans—they can't modify incentive targets quickly from equal emphasis on all products to increased stress on high-profit items.

Since salesmen today represent a sizable investment in hiring and training expenses, companies are taking an extra look at their compensation to make certain that as many as possible remain on the staff as profit-producers.

Too Much Updating

The successful invasion of the American market by the small foreign car has drawn some of its impetus, at least, from a sort of reverse snob appeal: the fact that annual model changes are avoided. Now a leading industrial designer has called for a moratorium on annual model changes on American products aimed at foreign markets, as one remedy for our declining foreign sales.

Says J. Gordon Lippincott, chairman of the board of Lippincott & Margulies, Inc.: "Matching every change in the calendar is making American products over-complicated, over-gadgeted, and too difficult to repair and inventory. An overseas distributor would far prefer to stock a

In-Plant "Automat"

New developments expand the in-plant feeding market . . .

Many companies are now pressing hard for new improvements in sales productivity to match the recent steady gains in factory efficiency. One obvious way to extend their outlets is to turn to vending machines as extensively as possible. Books, ice cubes, stockings, and even hangover relief (in the form of a whiff of pure oxygen) are all available from machines. But the most spectacular market growth—a twenty-fold increase in the past five years—has been in the use of vending machines for in-plant feeding.

Frequently companies discover that the installation of a bank of machines to serve hot meals, soup, sandwiches, coffee, and dessert can be the solution for a cafeteria that is a constant drain on the company. Also, small companies that couldn't provide a cafeteria can now substitute hot meals for the traditional cold sandwich and apple.

During recent months, several developments have appeared that give an extra spur to this new market:

- Change-makers for breaking dollar bills have finally been developed after years of research and many snags.
- Freshly brewed hot coffee is now available. It was the development of the hot-coffee machine using a concentrate that did the most to bring in-plant vending.
- New machines give much greater freedom of choice. One offers several varieties of sandwich ingredients—along with several different varieties of bread—so that the purchaser can put together any one of dozens of different sandwiches.

Offered as the first of its kind, this refrigerated vending machine displays 130 separate items, each of which is available through individual windows like the Automat restaurants in several Eastern cities.

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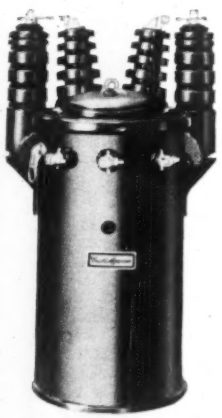
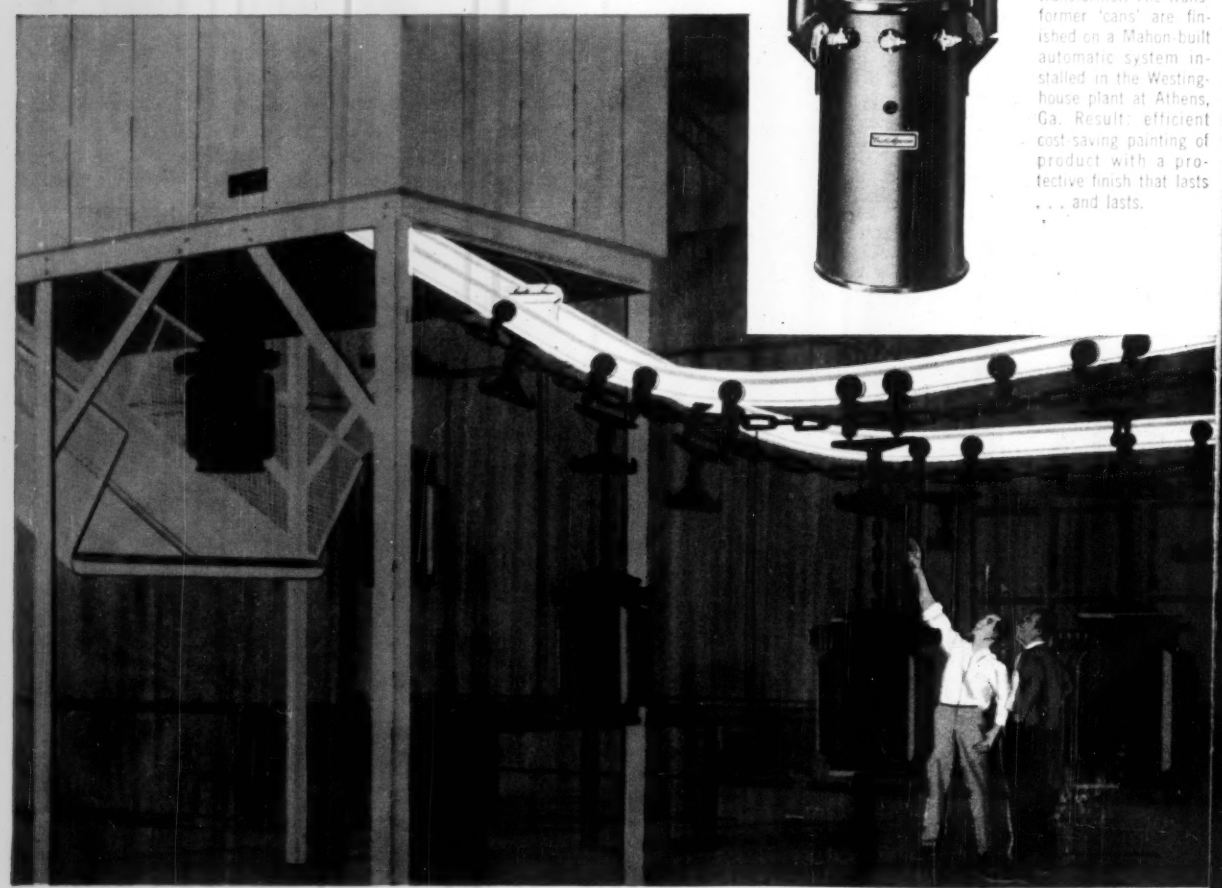


CASE IN POINT

The product—a Westinghouse distribution transformer. The transformer 'cans' are finished on a Mahon-built automatic system installed in the Westinghouse plant at Athens, Ga. Results: efficient cost-saving painting of product with a protective finish that lasts . . . and lasts.



product that doesn't change every year, but only when substantial technical improvements are involved.

"Foreign products are finding bigger markets all over the world because they are simplified, better engineered, and more reliable than our own. Many of our products have too many push-buttons and flashing-light panels, which make them more complicated and subject to breakdown. The problem of getting service overseas is a real nightmare. If we have problems of inventory, maintenance, and repair in cities as large as New York and Chicago, where it may take weeks to get a washing machine or air-conditioner back in working order, imagine what such problems mean in Teheran or Montevideo."

Revolt Brewing?

Consumer complaints about packaging—particularly from the housewife—are such an old story that one would expect few manufacturers would still be antagonizing their customers by selling products in hard-to-handle and hard-to-open packages. The sharp remarks on packaging made by two experts who evaluate packages from the consumer viewpoint shows, however, that industry still has a long way to go before it satisfies its best customer, the American housewife.

The growing importance of the leisure market is pointed up by the announcement of a California manufacturer that for the first time swimming pools will soon be available through department stores. Coraloc Industries, Inc., sees important benefits for the department stores in the tie-in sales of outdoor furniture, swimming suits, towels, and the like, as well as from sales of one of the fastest-selling products—in-the-ground home pools. Back in 1948, there were only 11,000 pools in the entire nation, and very few were family pools. At the beginning of 1960, there were 255,000, and 70 per cent were in private homes. So far this year, the number of new pools has been running at about 20 per cent above 1959 volume, and all signs point to a total of 85,000 new pools before year-end.

Speaking at the recent National Packaging Exposition sponsored by the American Management Association, Charlotte Montgomery, *Good Housekeeping*'s packaging expert, had the following feminine complaints to pass along:

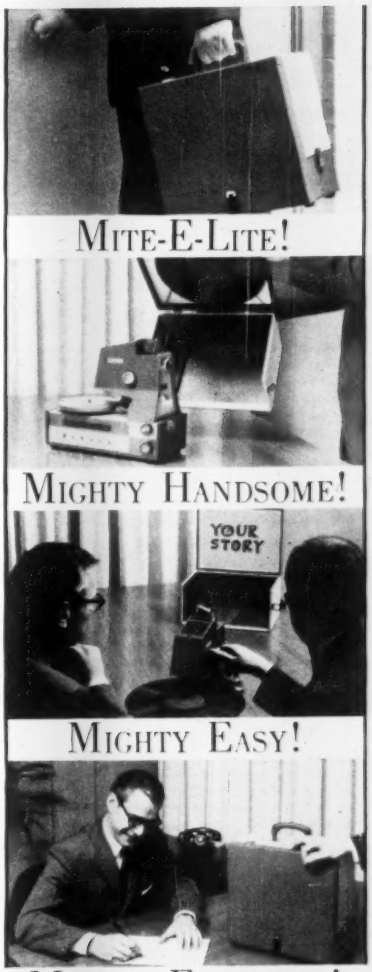
- Too many products that housewives use when their hands are wet come in slithery, slippery containers.
- Manufacturers put products in clear glass jars, then wrap them all up in labels that prevent the user from seeing how much is left inside.
- Hot dogs and hot dog rolls invariably come in unequal numbers.
- Packaged clothing is folded with too many sharp pins.
- Many products are packed in containers far bigger than their contents require, a real nuisance to the housewife with limited shelf space.
- The address of the manufacturer is often left off the package, an added frustration for the customer who has a complaint.
- Corrugated boxes are sealed firmly enough for a trip to outer space.
- Cans for coffee, corned beef, sardines, and so on require keys which wreak havoc on long fingernails.
- Valves on aerosol cans often don't work (a frequent complaint).

Mrs. Montgomery, herself a housewife, also reported what women *do* like:

- Convenience packaging, which also may be the clincher for a sale when the housewife has no brand preference.
- Attractive packages: the housewife likes packages with a removable outer wrap and an attractive unlabeled box or can underneath.
- Packages designed for one-hand operation, particularly those used while cooking or tending the baby.

Mildred Constantine, who assembled last year's packaging show at New York's Museum of Modern Art (see page 66, DUN'S REVIEW, October 1959), confirmed many of Mrs. Montgomery's findings. Speaking before the Folding Paper Box Association, she also pointed out that many packages found on supermarket shelves give no quick clue to what they contain—an obvious disadvantage to the manufacturer if the housewife is moving quickly along the aisles.

—T.K.



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Q How much time must be devoted to successfully operate a laundry store?

A This is a spare-time business . . . a few hours each week is ample. Service can be contracted out to an independent Authorized ALD Serviceman at a modest cost. Laundry stores are ideal for chain operation and/or absentee ownership, and investors like you now own 3, 4 and more stores netting $5000-$10,000 yearly per store.

Q What are chances of success without previous experience?

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New Product Parade

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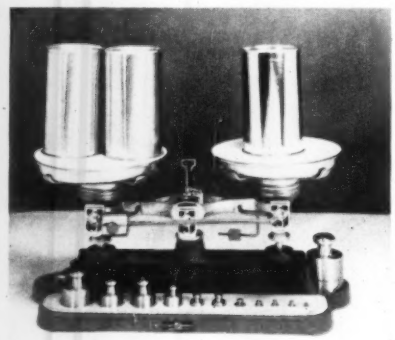
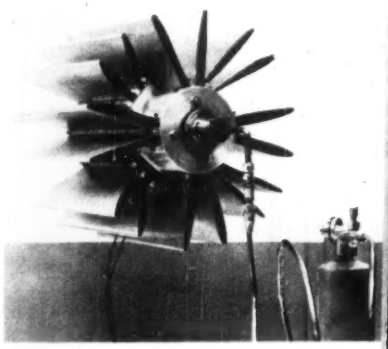
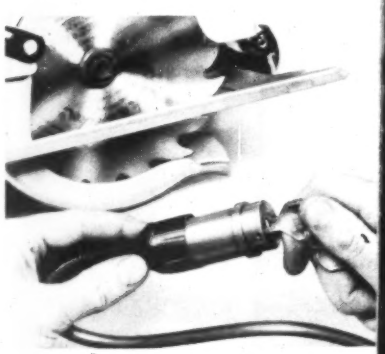


EQUIPMENT PROTECTION: A turn of the key on this new lock prevents the unauthorized use of electrical equipment. The device slips on either two- or three-pronged plugs and, according to the manufacturer, will protect everything from power tools to delicate electronic equipment. $1.49. *"Power-Blok," Hurd Lock & Manufacturing Company, Almont, Mich.*

FRONT-WHEEL DRIVE: Down-time for repairs is kept to a minimum on this new light panel truck from overseas. The power/drive unit can be changed in less than an hour by removing six bolts. The absence of a long drive shaft permits greater load capacity; the level load bed is only 14" from the ground. *Renault, Inc., 750 Third Ave., New York 17.*

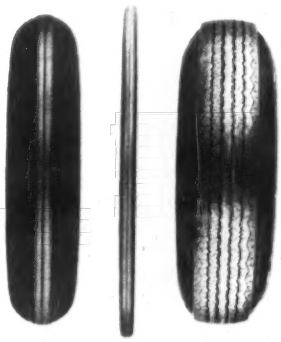


THIN TIN: A new tin plate about half the thickness of conventional plate is said to be stronger and more rigid. In addition to applications in the usual line of can manufacture, the new plate is expected to find such uses as disposable baking pans, paint cans, and frozen dinner trays. *United States Steel Corp., 525 William Penn Place, Pittsburgh 30.*



THIS MONTH: *Thermoelectric generator; more economical and safer packaging; cutting down-time for truck repairs.*

SLIM SPARE: A new compact auto spare that is less than 1" thick remains uninflated until needed. It can be inflated with a CO_2 bottle supplied with the unit. Tread life of the tubeless



spare is said to be over 400 miles, and the cost is substantially less than that of a conventional tire. *Dunlop Tire & Rubber Corp., P.O. Box 2011 Buffalo 5, N.Y.*

FIBER GLASS CAB: Several advantages over steel are claimed for this new fiber glass truck cab. It is 350 lbs. lighter, and the greater impact resistance and tensile strength of fiber glass

make it stronger. Its damping and insulating qualities cut noise and provide more comfort. *Diamond T Motor Truck Company, 4401 W. 26th Street, Chicago 23.*

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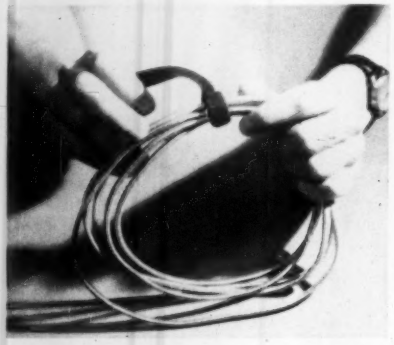
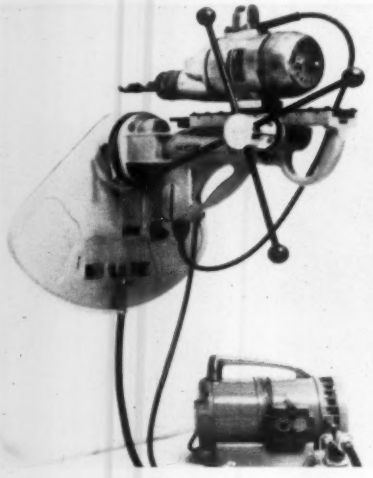
continued from page 187

HOOKS AND LOOPS: This nylon tape fastener can be opened and closed at least 100,000 times without loss of holding power, the manufacturer reports. One side of the tape is faced



with tiny hooks, and the other with soft loops. Shear strength is rated at 6 to 8 lbs. per sq. in. *"'Back-to-Back' Velcro," Velcro Corp., 681 Fifth Ave., New York 22.*

VACUUM: A 3,000-lb. holding force keeps this portable drill stand in place. The stand has radial and lateral adjustments for positioning the drill ac-



curately, and is adaptable to all portable drills. *"Vacu-Press," Bux Magnetic Products, Inc., 1355 North 10th Street, San Jose 12, Calif.*

REUSABLE ADHESIVE: A new plastic substance is said to adhere indefinitely to any surface, yet can be rolled off for reuse without leaving a residue. Unaffected by water or temperature changes, the plastic is suitable for such diverse uses as anchoring business ma-

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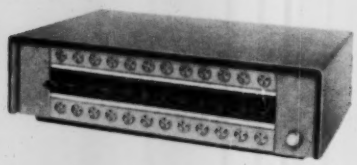

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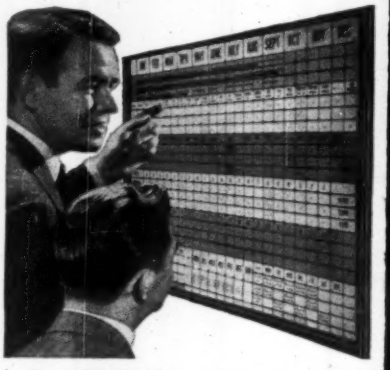

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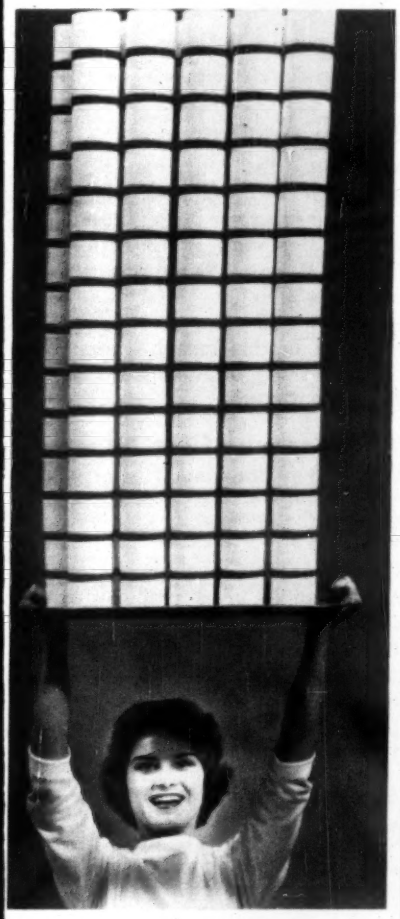

PLASTIC CONTAINERS: These new featherweight plastic containers for consumer products are said to be extremely strong, low in cost, and practically unbreakable. The cellular structure of expanded polystyrene plastic adds to the rigidity, yet is resilient enough to provide a leak-tight seal without the usual paper inserts. *Sheffield Plastics, Inc., Sheffield, Mass.*

CORNER CUSHIONS: Fragile products are shipped safely when packed with new foam cushions. The foam blocks, laminated to corrugated board, are placed at the corners between inner and outer shipping cartons to absorb vibration and shock. *"Hardi-Pads," Hardigg Industries, South Hadley Falls, Mass.* —E. G.

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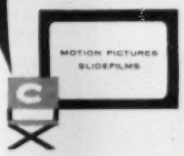

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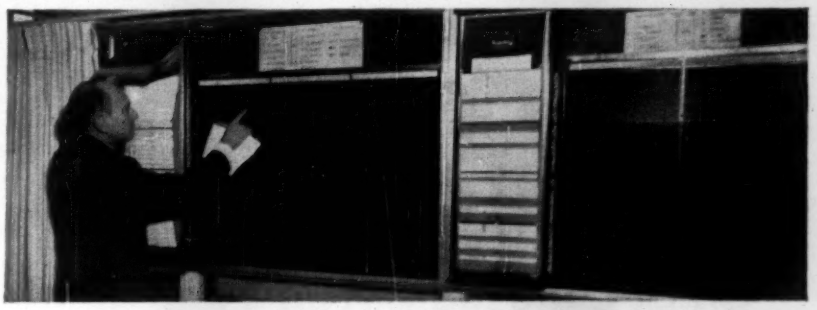

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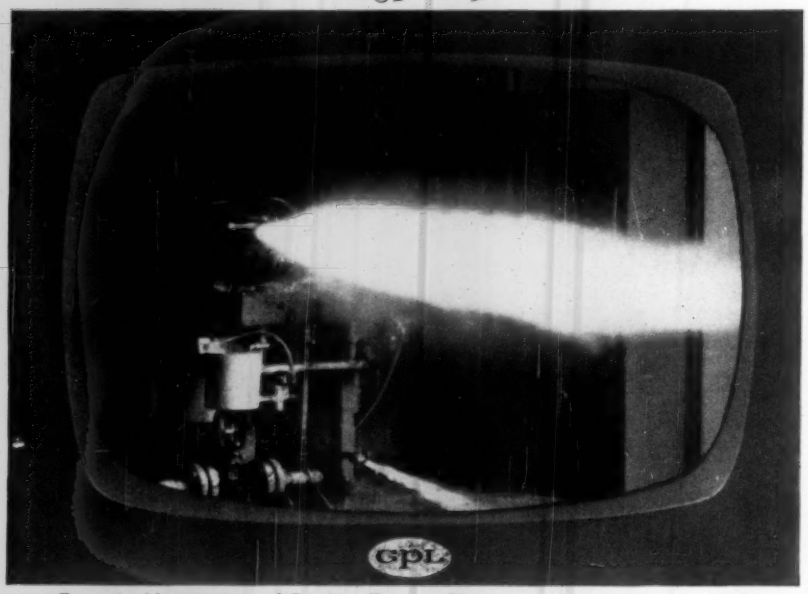

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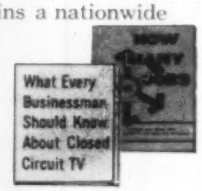

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EXECUTIVE BOOKSHELF

Brief Reviews of New Business Books

Money and Desire

THE POWERFUL CONSUMER *by George Katona. McGraw-Hill Book Company, 330 West 42nd St., New York 36. 276 pages, $6.50.*

What does the consumer take with her when she goes shopping? More than money in her purse, these "psychological studies of the American economy" reveal. She also must have a strong will to buy—a factor of enormous marketing importance, which is explored in this meaty report from the University of Michigan's Survey Research Center.

The Message Gets Across

MANAGING BY COMMUNICATION *by Willard W. Merrihue. McGraw-Hill Book Company, 330 West 42nd St. New York 36. 306 pages, $7.*

GE's manager of community and business relations gives practical advice for staff and line executives on how to improve labor relations, bring management's goals alive to employees, instruct supervisors and foremen in their new roles, plan a communications program.

Selling in a Complex World

MARKETING KEYS TO PROFITS IN THE 1960'S *edited by Wenzil K. Dolva. American Marketing Association, 27 East Monroe St., Chicago 3. 599 pages, $7.50.*

In this compilation of speeches delivered before the American Marketing Association, top marketing executives and consultants cover the general (marketing management, consumer attitudes, industrial sales, market research) and the particular (credit cards, N. Khrushchev, and the St. Lawrence Seaway), to mention a few of the topics.

No More Gobbledygook

TECHNICAL COMMUNICATION *by George Harwell. The Macmillan Company, 60 Fifth Ave., New York 11. 332 pages, $5.*

A handy book for management men to leaf through and pass on—marked "Must Reading"—to the technical staff. If it follows the instructions and examples, those mysterious communiqués from R & D will soon give way to concise reports in plain, readable English.

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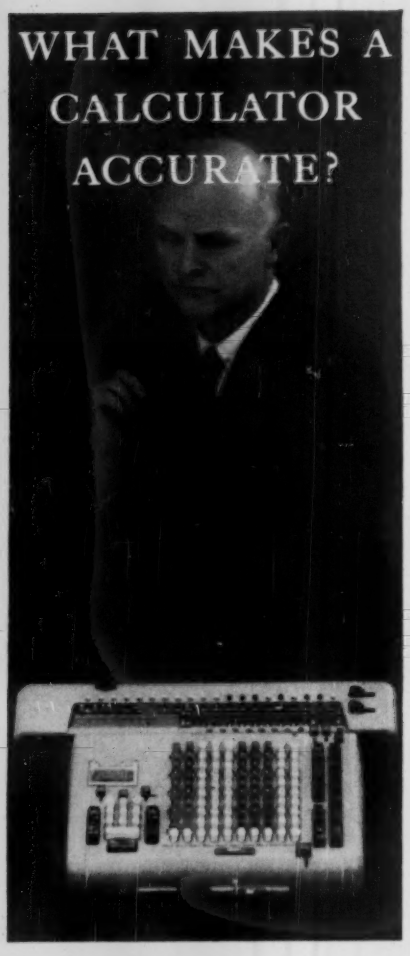

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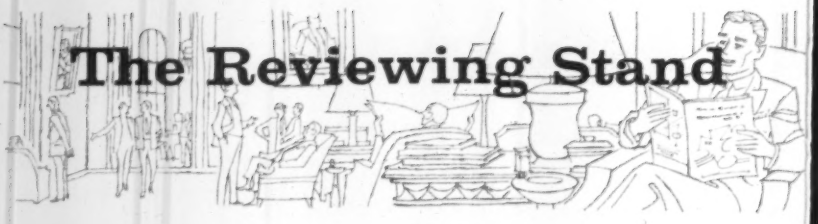

The Reviewing Stand

The Forgotten Man

IT has been said that the greatest waste of executive talent is the lost potential in middle management. In industry and trade, this is often true of the engineer, traffic manager, credit manager, office manager, or cost accountant whose duties and decisions are confined to a limited area. Many skills may be lost when a man becomes a specialist in a horizontal, often deadend, assignment.

It is an offense against conscience when a good man's progress is thwarted because he is so skilled in a minor role that his superiors won't take the risk of promoting him to a better job. Top management has a moral duty to consider these seven potentials of every staff subordinate:

1. His general competence.
2. His specific talents, itemized and evaluated in terms of his potential for greater responsibility.
3. His personality—the plus and minus factors that indicate leadership qualities or handicaps.
4. His mental level—the quality of his thinking on matters beyond routine job problems or assignments.
5. His sense of responsibility—the eagerness for assignments beyond the immediate scope of his job.
6. His social attributes—ability to get along with others inside and outside the company.
7. The mutual investment—what stake does the company have in his training and his future progress?

In our concern over the much-publicized shortage of top management men, let's not overlook nor undervalue the talent caught in our own corporate shadows.

A Question of Timing

Men who complain that they are "too busy" usually find time to do the things they want to do. When they say "I don't have time"—to read, to converse, to serve their industry or community—they mean their other interests have a more urgent personal appeal. The busy man has to discipline his time to the things that must be done, the things that ought to be done, and the things he wants to do. Persistent self-discipline brings a sense of satisfaction—but duty should not require the rejection of every pleasurable task. People are creatures of habit, and executives are no exception. The busier an executive is, the more likely he is to have time left over for some worthwhile altruistic effort.

Meaning and Intent

In court decisions, stone rows stand up as boundaries, despite their variations from the exact angles and degrees of deed surveys. Why? Because these broad and well-anchored fences indicate the intent of the original bargainers better than any reading on a compass. Precision in measurement or document can never take precedence over the will to convey land or meaning.

A Cheer for Parkinson

There are no book reviews in this column, but the Editor can't refrain from an enthusiastic note on Parkinson's Second Law as enunciated in *The Law and the Profits* (Houghton Mifflin & Co., 1960). Parkinson's First Law—"Work expands to fill the time available for its completion"—deals with the entrenchment of the officeholder. His second law—"Expenditure rises to meet income"—is concerned with the parasitic instinct of the spendthrift. Though there is neither respite nor redress from the inevitable, we can be grateful for the counter-irritant of Professor Parkinson's scourging wit. —A.M.S.

Space-age Communications

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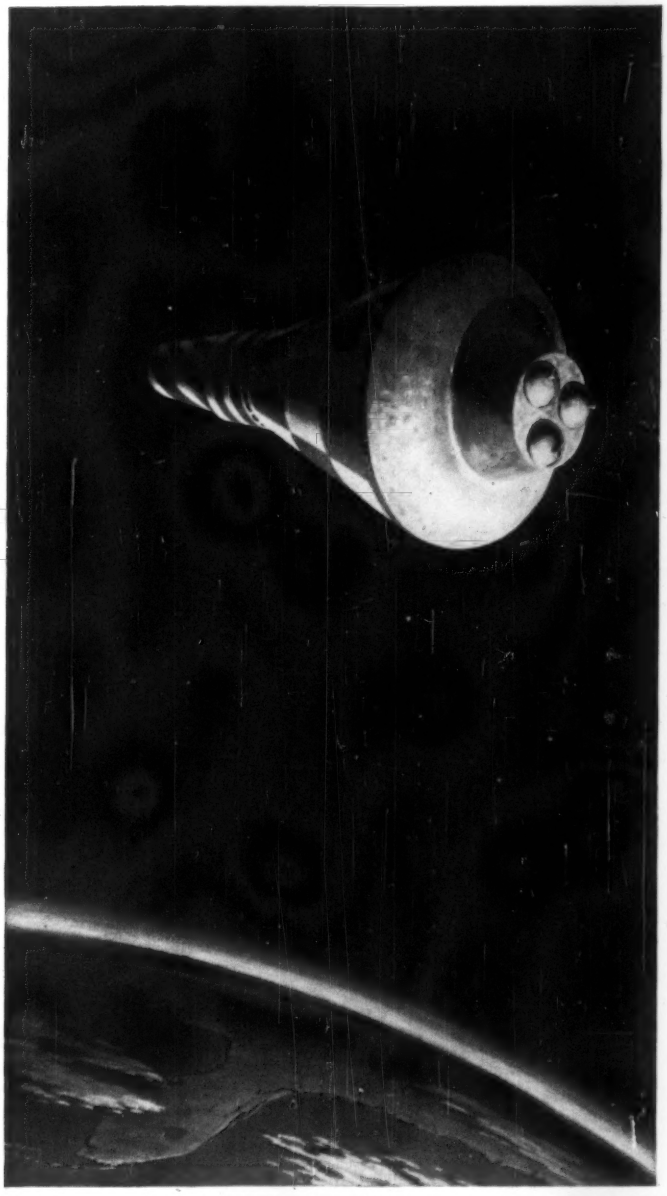
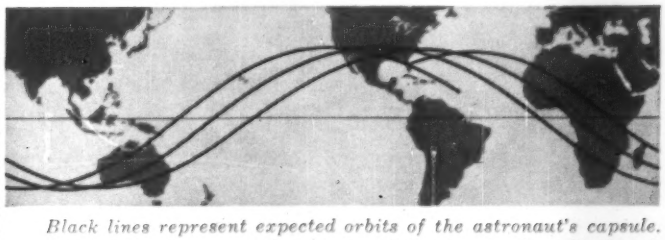


An artist's conception of the astronaut's capsule in orbit



Black lines represent expected orbits of the astronaut's capsule. Project Mercury ground stations will be close to the orbital path

is helping to create the world-wide communications and tracking network for America's first man into space

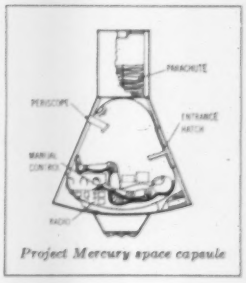
Another epoch-making space communications assignment was recently given to the Bell System.

Because of our experience in this field, we have been asked to set up a communication, telemetry and tracking network which will girdle the globe and maintain contact for Project Mercury—America's effort to put a man into orbit.

Western Electric, the Bell System's manufacturing and supply unit, heads an industrial team which will design and build this network for the National Aeronautics and Space Administration.

In all, 18 stations around the world are being constructed for the network, using existing radar and communication facilities where possible. The network's mission: to track and monitor the flight of the space capsule, transmit signals to its operating instruments, and provide a dependable voice channel between the astronaut and his colleagues on earth.

Creating communications systems for the space era which are as reliable as man can make them is familiar work for the Bell System. It's a natural development of the telephone system which serves you so well today, and will serve you still better in the future.



Project Mercury space capsule

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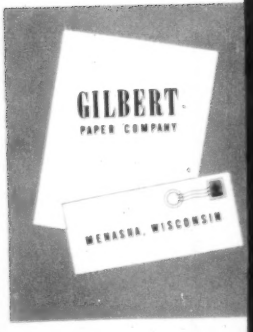

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